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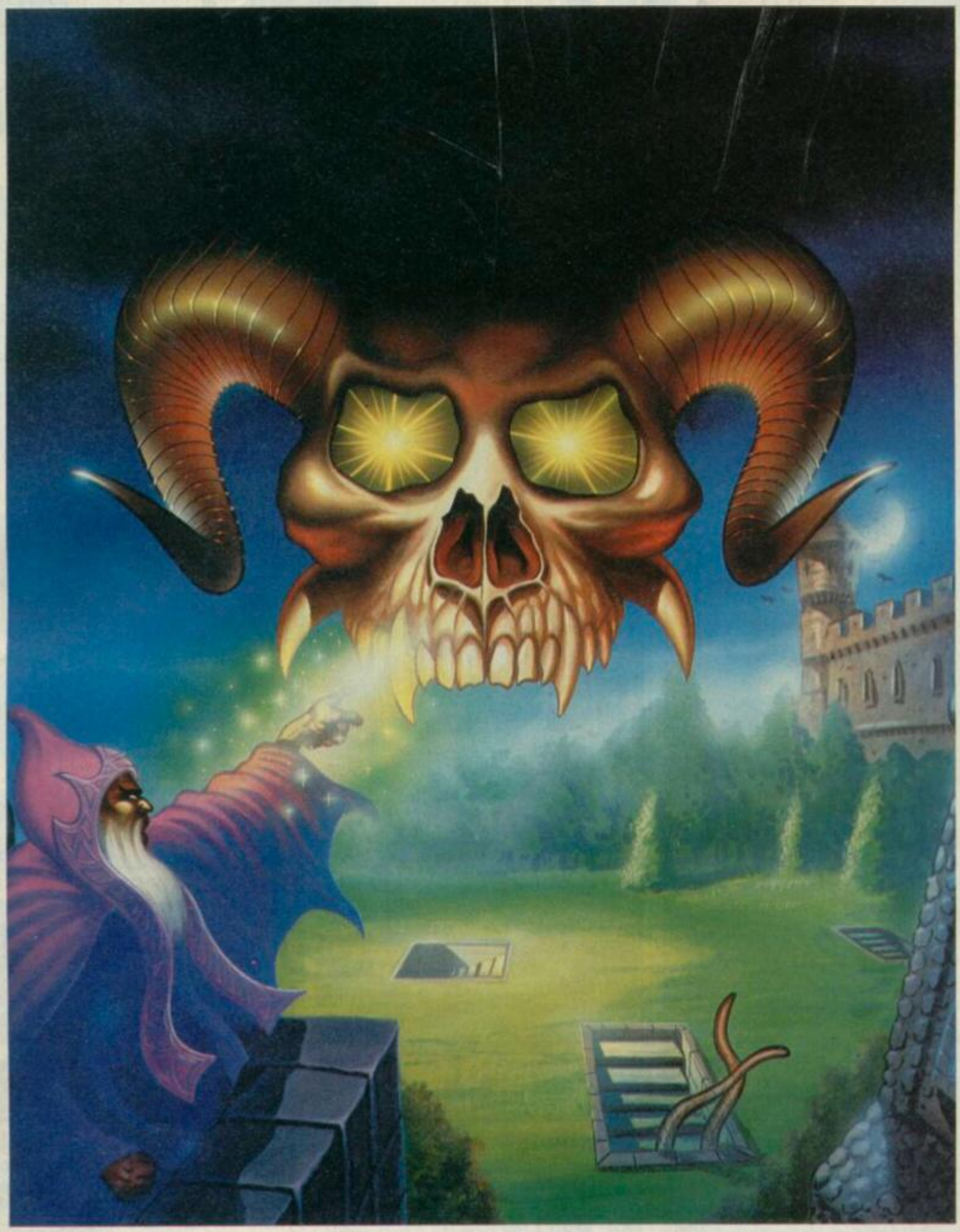

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Clare Edgeley
Designer
Gareth Jones
Editorial secretary
Norisah Fenn
Adventure help
Gordo Greatbelly
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Jon Riglar
Helpline
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Contributors
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Alison Morton
Advertisement secretary
Linda Everest
Subscriptions manager
Carl Dunne
Publisher
Terry Pratt
Telephone
01-251-6222
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Trapdoor

Mindstone

Stainless Steel

Psi Chess

SOFTWARE

ARCADE

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I.C.U.P.S.
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EIDOLON
TRAPDOOR
KUNG FU MASTER
GHOSTBUSTERS 128
ACTION REFLEX
STAR FIREBIRDS
CON-QUEST
STAINLESS STEEL

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Together with Talent you can help find him

ARCADE HITS

Future Shock 50
Clare Edgeley reveals all the coin ops now in conversion. The Spectrum mega games of the future. In the arcades now. On your micro tomorrow!

Ikari Warriors coin-op

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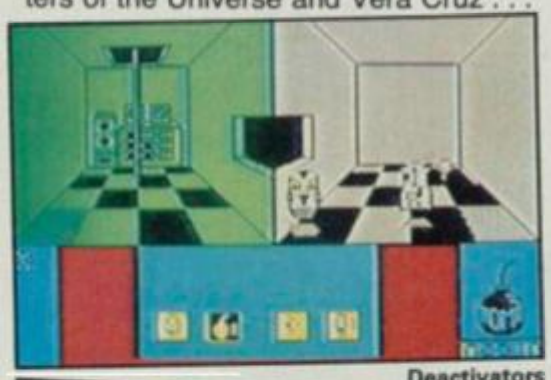

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Dempsey and Makepeace

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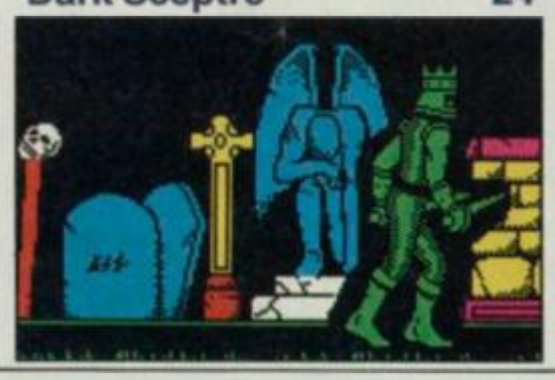

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DOMARK

UNDER RAPS!

● ***Ocean continues its programming arrangement with US Gold. In-house programmers are preparing*** *Super Cycle, World Games, Express Raider* ***and*** *Break Through.* ***All titles are arcade games, the last two being conversions from Data East coin-op hits.***

● ***Canvas is producing Ocean's latest fab fix,*** *Miami Vice.* ***The company is a break-away team of programmers from Denton Designs, the company responsible for*** *Shadowfire* ***and*** *Enigma Force.* ***See*** **News** ***and*** **Previews** ***for more info.***

● ***Fergus MacNeil and his team are working on two new adventures —*** *Enchantress* ***and*** *Good Night Cold World.* ***Both will come out around Christmas for the 128 and will appear on a new label Abstract Concepts. Abstract Concepts — set up by Fergus — is to concentrate on more serious adventures.***

● ***Keith Burkhill — author of the*** *Commando* ***and*** *Ghosts 'n' Goblins* ***hits — is now working on a third arcade conversion for Elite. Space Harrier is being developed from the Sega coin-op of the same name and it should be finished by Christmas.***

● ***The authors of*** *Terrormolinos* ***and*** *Hampstead* ***are at it again. Peter Jones and Trevor Lever have just finished work on*** *Dodgy Geezers*

APOLOGY
The Writer

We incorectly gave our review of Softechnics' The Writer (August *Sinclair User*, p 82) only one star (★) instead of five (★★★★★).

Sinclair User **apologises unreservedly to Softechnics for the inconvenience caused by the omission.**

▲ **Connery gives Lambert a traditional Highlander greeting**

▼ **Brown as The Kurgen** ▼ **Lambert as NYC**

007 STAR GETS OCEAN TIE-IN

Sean Connery whisks off his 007 toupee to star in **Highlander**, the new film — and yet another Ocean-licensed game.

The **Highlander** arcade adventure centres on a god-like race of beings, called the Immortals, who wander through time until they all meet and do battle for the ultimate prize.

Conner MacLeod, the story's hero, played by Christopher Lambert, is an honest Scots lad with hatred of his clan's enemy The Kurgen, played by Clancy Brown.

During the height of battle The Kurgen stabs him with a sword and he thinks he's had his chips. No such luck!

He's informed by his mentor Ramirez, played by Sean Connery, that they are Immortals and cannot die. Conner tracks The Kurgen to contempory America where the villain's latest sport is lopping the heads of unsuspecting New Yorkers. He teams up with Brenda Wyatt, played by Roxanne Hart, to top The Kurgen before he can claim the ultimate prize.

What would you give a 2,000-year-old Immortal for Christmas?

The music in the movie, by the way, isn't that old. It's by *Queen*.

The game should be available in September at the same time as the film gets its London premiere.

PLUS TWO LIFT-OFF DATE SET

Amstrad has leaked the launch date of its new Spectrum compatible micro — the Spectrum Plus 2. It is to be officially unveiled on September 2.

The machine — an enhanced vesion of the Spectrum 128 — is then expected to be in the shops a week later and, simultaneously, to be on show at the *Personal Computer World* Show.

The new machine has a dedicated data recorder bolted on to its right-hand side and is also likely to include dual joystick port — not Kempston compatible — and an Amstrad-style keyboard. Memory is expected to equal the 128's capacity. The Plus Two will probably retail at £139.95, the base price of Sinclair products announced by chairman Alan Sugar earlier this year.

Production is already well advanced and selected software houses had preproduction machines on which to develop software by the end of July.

'HOOK' CASH FOR BOY GEORGE CLINIC

Princess Di has stepped in to help distribute funds from the anti-drug abuse micro charity tape **Off the Hook.**

In a letter from the assistant private secretary to the Prince of Wales she indicated that a substantial sum — thought to be around £10,000 — of the money so far collected from sales of the tape will go to the Alcohol and Addictions Centre in Newcastle upon Tyne.

A further amount — around £15,000 — held in the Prince of Wales Trust has been given to the Double-O charity which funds the work of, among others, Dr Meg Patterson — recently in the news as the doctor treating Boy George's heroin addiction.

Princess Di: helping to direct Off The Hook **funds**

NEWS

MIAMI VICE TWINS SHOOT OUT

Prise the drug racketeers out of their lairs in **Miami Vice**, Ocean's latest licensing deal.

The icon-driven arcade game closely follows the BBC TV/ Michael Mann series with designer detectives Crocket and Tubbs on the Turbo charged trail of a $1 million contraband shipment.

Gun-toting Tubbs checks out the locales while Crocket stays, sensibly, with the pastel-shade street machine.

● See preview pages for the whole scam.

ULTIMATE ADD-ON

Looking to expand your Spectrum? Saga — the add-on keyboard manufacturer — has a bright idea.

Called The Compliment, it's a package of nearly every add-on you could want for your machine — all for £342.

Compliment includes a Saga typewriter-style keyboard, 3.5inch disc drive, better than 100 character per second near-letter quality printer and a version of Saga's **Last Word** word processor with built-in **Mail Merge** — all on disc. The whole lot is compatible with both the 48K or 128K Spectrum models and will be official launched at the ZX Microfair in Westminster on September 20.

Despite being designed as a low-cost word processing kit and being over £100 cheaper than Amstrad's successful PCW8256 model David White Saga's boss, says it isn't an Amstrad basher.

● Compliment is just the start for Saga. Three completely new micros will follow, the first before Christmas. All Z80-based again, the range includes a low-cost games machine, more advanced model with improved interfacing and keyboard and the bells-and-whistles version with mouse, Eprom slots and more.

compliment

DRIVE IN GEAR

The threatened shortage of microdrive cartridges has been averted by an interim deal between Sinclair Research and manufacturer Ablex.

Ablex is now able to supply blank cartridges to the trade who can then pass them on to QL and Spectrum Microdrive owners.

John Lee, Sinclair's financial director, says: "With monthly demand running at between 50 and 75,000 units, and increasing, we both felt it important to end any confusion over the security and distribution of future supplies".

Ablex holds adequate cartridge stocks to satisfy demand and discussions are going on between the two companies to thrash out a deal for the continued manufacture and supply of cartridges.

SOUNDING NIFTY!

Advanced music technology at a budget price — Cheetah is launching its long-awaited sound sampler and MIDI interface for the Spectrum.

The sound sampler will allow you to sound like *The Art of Noise* or play your pet cat in the privacy of your own bedroom for a mere £44.95.

The MIDI interface is a separate package which will allow the control, via the computer, of synthesisers, drum machines and sequencers.

Price for the MIDI system is £49.95.

TWTMTW
THAT WAS THE MONTH THAT WAS

It's here! In less than two weeks the Spectrum Plus Two will be with us.

As the first new Sinclair micro from the Amstrad stable, we're all waiting with bated breath. It should be on show for the first time to the public at the Personal Computer World Show, held at Olympia in London from September 5 to 7.

The Plus Two will be the lowest-priced 128K machine on the market meaning that finally the long-awaited flood of 128K enhanced titles should be released. Selected software houses have already had development versions of the new micro for over two months — all terrifically hush hush — specifically so they can write programs in time for Christmas.

So things are looking good!

Indeed the next few months look very exciting with Sinclair set to be well out in front.

Commodore's problems seem to be deepening day by day with its American PR firm now admitting quite openly that the firm is "struggling". A $40m advertising campaign for its mega-micro, the Amiga, has been scrapped. It's looking for a loan of another $135m to last it through to next March! And there's still no UK news of its new 64K model, the Commodore 64C. To cap everything, Commodore seems to have abandonded the home users altogether and has announced it won't exhibit in the home computing hall at the PCW Show — it'll only be showing its business machines.

The weirdest thing of all, though, is Acorn. At least with Commodore you get the feeling that they are trying to do the right things — even if circumstances seem to conspire against them — like having no cash!

Acorn are incredible — in a class of their own. News has leaked that Acorn is planning a new Baby BBC micro to 'compete' with Sinclair and Amstrad. It's a cut-down Master, apparently, with built-in 3.5inch drive and monitor, but the rumours are that it'll be priced in usual Acorn style — well over the top. A figure even as high as £550 has been mooted. Phew!

At that level it might outsell Cray — makers of the multi-million pound super-computers. And they've just broken their record with 20 sold so far this year!

Meanwhile the software scene for the Spectrum has never looked brighter. Word is filtering through — bit by bit — of an unprecedented number of programs under development for the Autumn. From the demo programs and pre-release tapes flooding across our desks it looks very exciting.

Right now cops are in vogue. First *Miami Vice*, then *Dempsey and Makepeace*. Whatever next? *Cagney and Lacey*? *Hill Street Blues*? There can't be that many left ■

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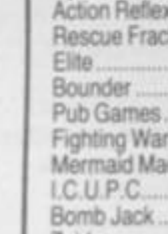

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NEWS

NEW HOPE FOR QL AS QLAID FORMS

More help is at hand for the QL. The pressure group, QLAid — involving most of the top firms supporting the QL, formed to save the QL from Amstrad — now seems to be making progress.

One member of the QLAid group, A+ Computer Response, has already purchased the rights to QL products in the US. The company has so far invested a large sum of money to market the QL for the first time in the US.

In Britain two companies have approached Amstrad in another attempt to buy the UK rights for QL manufacture and marketing. A source close to the deal would not name the companies concerned but confirmed that both were waving around sufficiently large cheques to make agreement possible.

QLAid, itself will be officially launched at the *Personal Computer World* Show in September. The organisation includes software and hardware suppliers from Europe, the USA, Greece, Spain and the Far East. The main supporters of the project are Transform, *QL World*, Eidersoft and Danish distributor Helmut Stuvern. Transform is co-ordinating the production of a roadshow stand which will visit computer events to promote interest in the computer.

Cheetah Mach I

Suddenly joysticks are everywhere!

Mach One is the ultimate joystick according to Cheetah. It has four sensitive fire buttons — two in the handle, two on the special-shaped base. It knocks out at £14.95.

And then there's the Magnum joystick, the first hardware product from budget game giant Mastertronic.

The Magnum will be available soon from most high street stores and costs between £12 and £14.

SEE US AT THE BIG SHOW

The 9th *Personal Computer World* Show is on from September 5 to 7 bringing together Sinclair, Amstrad, Commodore and Atari, as well as a host of software houses. Admission is £2.00 and the doors open at 10am.

***Sinclair User* will be there. We're on Stand 3041 and we look forward to seeing ya!**

What to look out for:

Activision, Addictive, Alligata, Amstrad, Beyond, Bubble Bus, CDS, Cheetah, CP Software, CRL, Cumana, Digital Integration, Domark, Duckworth, Durrell, Eidersoft, Elite, Firebird, Gargoyle, Gemini, Geoff's Records, Gremlin, Hewson, Interceptor, Kempston, Level Nine, Llamasoft, Mastertronic, Melbourne House, Micronet 800, Mikro-Gen, Miracle Technology, Mirrorsoft, Modem House, Ocean, Opus, Orpheus, Pace, Piranha, Prospero, Psion, PST, Qume, Rainbird, Ram, Robotek, Romantic Robot, Sagesoft, Sinclair Research, Softek, Tasman, Technology Research, Transform, Tynesoft and US Gold.

KING CHIP'S TRIVIA IS PUT ON TRIAL

King Chip, from XYLYX Computer Entertainment (XYLYX? That's what it says!) is a computer version of *Trivial Pursuit*. Not a computer game like Domark's but a new board game about computers. Up to six players can play answering graded questions in a race to the computer Throne of Knowledge.

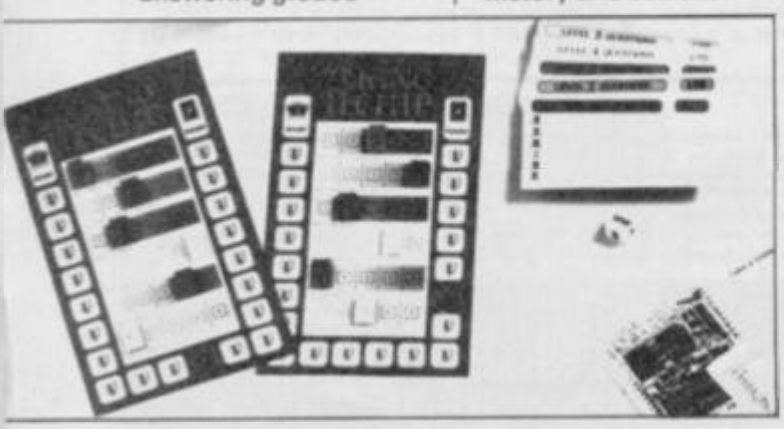
You move your coloured chip around a track on the board and the player to reach the centre first wins.

Questions are in six categories: data communications, history and current events, hardware, jargon and acronyms, potpourri and software. These are further divided into five levels of difficulty (it's getting confusing already).

Did you, for instance, know that Atari is the Japanese word for warning or that Burger King restaurants awarded a $3,000 scholarship to an American student who embezzled MacDonald's? You'll need to, to play *King Chip*.

Every question seems certain to teach you something new and totally useless about computers.

More information about the game, which costs £29.95, can be obtained from Anglesey Consultants, PO Box 1, Beaumaris, Anglesey, Gwynedd.



CREDIT MANIA

Credit card software is nearly here — high capacity Rom or Ram cards cunningly shaped like a credit card will soon be available for the Spectrum.

The cards are already available in Japan for the MSX machine but now Cumana plans a credit card software interface for the Sinclair machines. All the indications are it will be launched at the *PCW* Show in September.

The special Astron cards can be programmed for almost any type of application and come in four versions, Roms, Proms, Eproms and Rams.

Just hook up the interface and slot in the card and you can instantly load in programs a couple of hundred K in size. Eventually the system will be able to hold up to 1 megabyte of Cmos Ram, powered by a five-year life lithium battery. Cumana believes the cards could eventually replace both cassettes and lower capacity discs.

More information from Cumana, Pines Trading Estate, Broad Street, Guildford, Surrey. Tel: 859 380.

QUARK STRANGENESS CHARM

● Masterswitch is a nifty device to take the mess out of tangled television computer and video aerials. The black plastic unit plugs into your TV aerial socket and takes three source aerial leads — computer, video, and conventional TV input. Masterswitch costs £12.95 and is available from Laskeys.

● Tandata has slashed £20 off the price of its QL modem system.

The package — including Q-Connect, Q-mod and Q-Call is now available for £79.99. Q-Connect, the base unit with buffered RS-232 and comms software, can be purchased separately for £49.99 or together with Q-Mod, the unit's V23 modem, for £59.99. Q-Call will now cost £29.99.

Details from Tandata Marketing, Albert Road North, Worcestershire WR14 2TL. Tel: 06845 68421.

● Does your Spectrum slip across the table while you're playing the latest coin-op conversion? You need. . . Stopslip. This anti-slip mat from Cobinic is the ultimate in Spectrum hip and trendiness. Just drop it on the table and your Spectrum will never be a skateboard again. Sounds very tacky. If you want one call (0483) 505260.

● The Collins *Gem Dictionary of Computing*, compiled by Ian Sinclair, provides information on more than 2,000 terms — from Access to Zero compression. The dictionary costs just £1.95 and is available from most book shops or by mail-order from Collins, 8 Grafton Street, London W1X 3LA.

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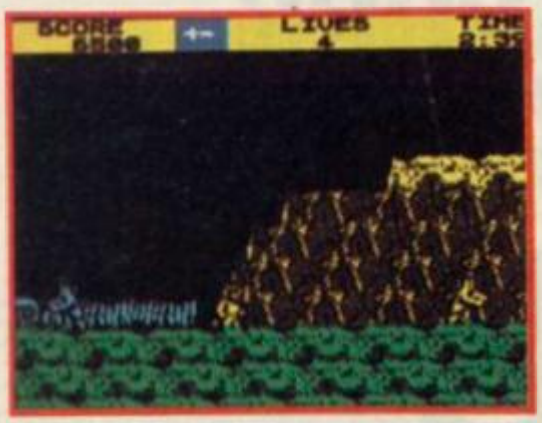
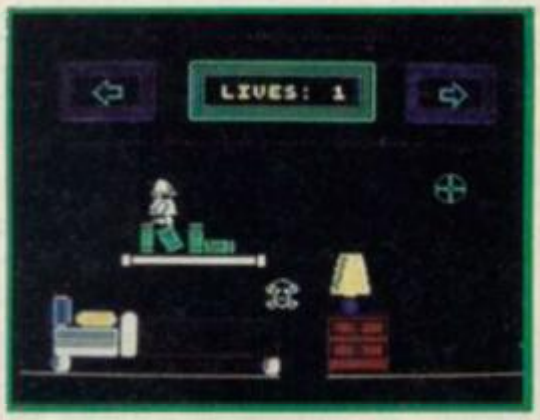


▲ In the top slot: Ghosts 'n' Goblins

▲ Tip for the No 1: Bobby Bearing



▲ Longest on the chart: Incredible Fireman

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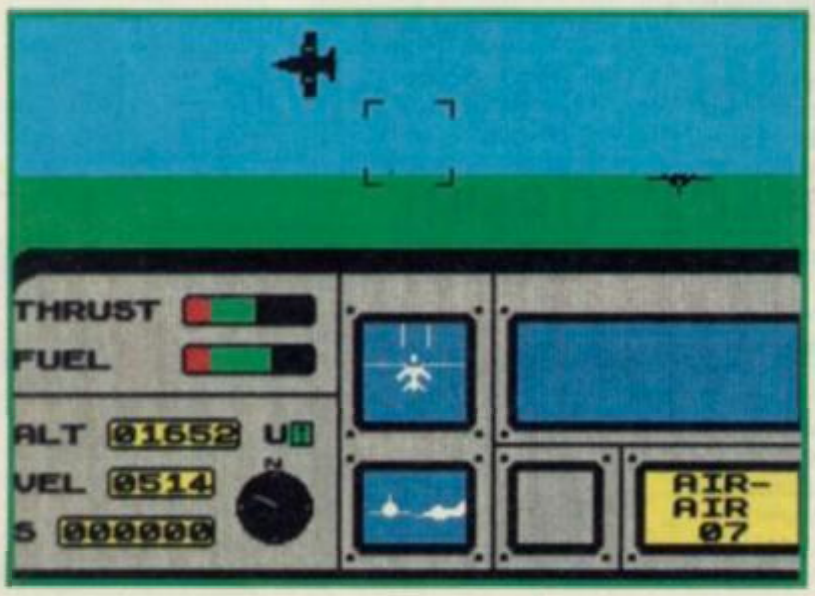
20	(14)	BOMB JACK	ELITE	£7.95

HOTTEST CLIMBERS

★ ★ ★ ★ ★ ★ ★ ★ ★

Hottest new releases this month: Ace is an excellent flight simulation which doesn't forget that blasting things out of the sky is all part of the fun; Hijack — political powerplay



E★N★T★Y

Another classic arcade conversion from Elite. Fiendishly difficult	★★★★★
Cartoon graphics and masses of brain teasers. This'll sort out who are the wimps	★★★★★
Routine conversion from the C64 on which little thought or effort seems to have been expended	★★☆☆☆
Imaginative, surreal and addictive. Packs more punch then superficially similar offerings	★★★★★
Poor quality. Not the Exploding Fist type game it may seem. Avoid	★☆☆☆☆
Eccentric space odyssey. A brilliant animated adventure at a budget price	★★★★★
More challenging than Commando. With more strategy required it wins hands down	★★★★★
Opportunity to play out the armageddon scenario. Chilling realism with graphic simplicity	★★★★★
At last, an adventure combining graphics and text really satisfactorily. Great	★★★★★
Fairly standard arcade adventure. Hardly earth-shattering graphically	★★★☆☆
The graphics are so bad, they're funny. Easily the worst tie-up yet	★☆☆☆☆
Four games for the price of one. It's one of the better film tie-ins	★★★★☆
Nicely atmospheric and extremely addictive. It'll drive you batty	★★★★★
Played like Pole Position. The idea of using a sellotape tin as a steering wheel is great	★★★★☆
A late release in the Marble Madness epidemic, but very, very nice	★★★★★
Bigger, better and brighter than the other oriental combat games. Fist, but better	★★★★★
Tired variant of Atic Atac graphics and playing style. Should long ago have been laid to rest	★★☆☆☆
Marble Madness and some. A magnificent program that 'll have you hooked	★★★★★
Four old hits: Bruce Lee, Matchday, Matchpoint and Knight Lore. A mixed bag	★★★★☆
A sort of unpredictable Chuckie Egg with shades of Pacman. Great fun. Good conversion	★★★★☆

and limited time in this icon controlled hijack simulation, and Pyracurse — a sophisticated 3D romp through Lost Arc territory. All ready to leap into the Top 20

Compiled by Gallup for *Sinclair User*

CHART ★ ★ ★ ★ BREAKDOWN

ARCADE

1	GHOSTS 'N' GOBLINS	ELITE
2	JACK THE NIPPER	GREMLIN
3	KUNG FU MASTER	US GOLD
4	MOLECULE MAN	MASTERTRONIC
5	NINJA MASTER	FIREBIRD

ADVENTURE

1	HEAVY ON THE MAGICK	GARGOYLE
2	KENTILLA	MASTERTRONIC
3	PRICE OF MAGIK	LEVEL 9
4	SEABASE DELTA	FIREBIRD
5	THE HULK	AMERICANA

▲ Jack the Nipper

▲ Theatre Europe

▲ Molecule Man

▲ Graphic Adventure Creator

STRATEGY SIMULATION

1	THEATRE EUROPE	PSS
2	WORLD CUP CARNIVAL	US GOLD
3	RUGBY LEAGUE MANAGER	ARTIC
4	ELITE	FIREBIRD
5	SAMANTHA FOX STRIP POKER	MARTECH

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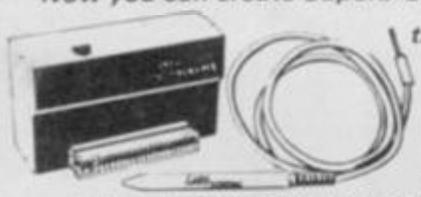

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Rambo, Gordo and other great questions

AFTER READING the letter headed 'User Podium for Politics' in the August issue I was disgusted to say the least.

Gabby obviously needs his head examining. Trade Unions dangerous? Where would the Proletariat be without them? And why not mix politics with computers, or anything else for that matter?

How dare this idiot Gabby call *Sinclair User* a *Computer and Vegetable Games* clone?' Gabby is obviously an idiot — I mean he says he's a friend of Rambo!

Anyway you guys at *Sinclair User* were immediately forgiven when I turned to Page 16 and saw a letter penned by my comrade Paul Kelly. I congratulate him publicly — Kelly's doing a great job in the PR department. And I agree with him that Ultimate are *out*! **Kirel** and **Elite** are fab, and **Quazatron** deserved six stars.

Michael Wilson
(Founder and Leader of the Humanitarian Democratic Communist Party)
Cheslyn Bay
Nr Walsall
Staffs

PS Bet you're pretty chuffed I've written to you three times now!

I WOULD like to reply to Paul Kelly (August issue) who made rather unflattering remarks about myself and **Cyberun**. First he says **Space Invaders** looks like **Elite**. This is true but both games are equally as boring.

But it is criticising Ultimate's masterpiece that particularly annoyed me, if he likes **Kirel** he must be mad and take note Kelly, you scum, you must be the worst arcade player out if you can't finish **Knight Lore**.

James 'not such a complete idiot' Baldock,
Waterbeach
Cambs

IT IS sickening to see the treatment that Ultimate has been subjected to over the last couple of months.

Firstly, unending criticism over using 'Filmation' and then, when Ultimate changes the

The Ultimate solution

formula, it is slated as a rip-off of one of their earlier games.

Funnily enough, while scores of software houses use the same type of graphics as 'Filmation' only the pioneers of the system are accused of repetition. *Sinclair User* has had bad words to say about Ultimate since **Gunfright**. What's so different about **Pentagram** that it gets three stars, while **Movie**, and **Fairlight** get classics?

But we never hear any cries of 'Oh no! Not another **Marble Madness** clone'. **Gyroscope, Quazatron** and **Spindizzy** all very similar games, have all been awarded five stars. I'm not saying these games are sub-standard. But I have also played the Ultimate games, and thought them just as good.

Adrian Walker
Praa Sands
Cornwall

PS. I hope you have a nice clean wastepaper basket to throw this superb letter into!

● *Yup! There it goes, straight into the round filing cabinet*

Software rescue for 128

HAVING bought the new Spectrum 128 at top whack of £179 when it first appeared, I am beginning to feel more and more cheated by Sinclair/Amstrad.

First the price drops £40 just weeks after I bought it. And now when you tell us about the Plus 2, which sounds just like a rehoused Spectrum 128 (is it?)

I am now very annoyed with the way I have been treated.

Scott Liddle
Billingham
Cleveland

● *Unfortunately, that's progress. There never is a particularly good time to buy a micro because machines are still developing at an astonishing rate. It may seem very unfair but otherwise we'd all still be buying ZX81s!*

The Plus 2 looks like it will indeed be a rehoused 128 with a built-in cassette player.

I HAVE OWNED a Sinclair 128K since the day it was released at Dixons.

I have over 100 games and programs including **Knight Lore, Elite, Nightshade** and many others mentioned as being incompatible. This is not true! I have not found any compatibility problems with any item of Spectrum Software (in 48K mode).

Perhaps people should spend less time complaining and more time getting the volume and tone right.

K M Windsor
Haslemere
Surrey

● *Most software firms have now changed their incompatible programs so they work on the 128 in 48 mode.*

I'VE RECENTLY bought a 128K Spectrum. Great, I thought, as I read through the leaflet of 128K games, an up-graded **Matchday**, an up-graded **Spitfire 40** and up-graded **Bored of the Rings**.

I quickly saved up my precious pennies, all 995 of them and rushed to our nearest town. I must have asked for **International Matchday** a thousand times, all I got was 'sorry'. The only 128K game anywhere was **Gladiator**. How about a bit of service from the shops?

Simon Walker
Filey
North Yorkshire

● *Suddenly there's a whole host of 128 up-rated programs appearing so the situation should improve considerably. In this issue you'll find* ***Ghostbusters 128*** *and* ***Elite 128.***

A misunderstood machine?

Master of the Universe

I HAVE to complain about Graham Taylor's review of **Ninja Master**.

I enjoy the game a lot and have managed to achieve Green Belt with a score of over 40,000.

Tell Firebird and Ninja's author Tron someone loves them.

Mark Fullbrook
Colchester
Essex

● *Firebird and Tron — 'someone loves them'.*

LETTERS

As above and so below

I WAS very glad that your reviewer John Gilbert found the **Professional Astrologer** program for the QL so competent. Unfortunately his underlying ideas about what astrology is appear to be somewhat confused.

Perhaps the easiest way to look at astrology is to start with the Moon. We all know that the Moon influences tides and sensitive people. If you bear in mind that humans are composed of 97% water then it is not unlikely that the Moon affects us all! Astrology takes

Life the universe and everything. . .

this idea a step further by saying that all the planets exert an influence on us all in some way, and affect the way we are disposed towards life and the challenges it presents.

Through all this it is possible not only to ascertain how individuals will be inclined towards "property, money and friendships" (a ridiculously simplistic view) but how they will be inclined towards every area of life.

Equally, it seems hasty to say of a computer program that it indicates whether 'your life will be trouble-free or not'. Lovely though that idea may be, I haven't met the person whose life is trouble-free yet! All astrology can do is to point out which areas troubles are likely to be in.

I'm sure that **Professional Astrology** has a lot going for it, and certainly hope it stimulates interest in astrology as an art.

Mike Scialom
Whyteleafe
Surrey

●*John Gilbert replies: My review was intended as a comment on a product not a thesis on astrology. I hope I put across the idea that astrology does not predict but rather indicates possible actions which are a result of a person's psychological make-up. I can assure you that my five-year study of the subject — albeit a long time ago — was not pursued by reading the solarscopes in the tabloids!*

Carnival carve up continues

MY LETTER concerns what I now regard as the scandal concerning the US Gold/Artic Software/A S Designs game **World Cup Carnival.**

I bought my copy on May 31 and was so disgusted at the fact it was a blatant and *undisguised copy of Artic* Software's **World Cup Football** (a game two years old and one which can be bought now for under £2) that I sent the game back to US Gold first class, under recorded delivery on the following Monday.

US Gold did not have the courtesy to reply to my letter, so I telephoned them, only to be told that US Gold is 'not in the habit of giving refunds' and that **World Cup Carnival** 'represented marvellous value for money'.

When I asked whether I would be receiving my money back, the receiver was slammed back on the hook.

M Jones
Northam
Southampton

YOU LOT do not know what you are talking about. That's what I think of your write-up of **World Cup Carnival** in the July edition.

That person called Clare Edgeley gave **World Cup Carnival** one star out of five which is absolute rubbish. I think it's *brill*. And I saw it was top of the charts. Clare Edgeley — go and kill yourself.

Paul Davies
Brelon
Powys
South Wales

●*Clare keeps trying to throw herself out of the office window but we're keeping all the windows shut!*

An urgent message. . .

I DID write you a letter (condensed and in italics) but **Tasword II** has just executed a plot on my Opus and Brother M1009 to chew it up. Will make contact again.

A Deprived
Adventurer

●*Sounds a bad break. Await your contact.*

And now for something completely different

WE'VE BEEN making some changes to the magazine over the last couple of months — like the new charts page and new style of reviews layout — and we want to know what you think. We are fighting to make *Sinclair User* even better and so far the letters seem to be running more than three to one in favour. Write and tell us what you reckon.

We'll also be sampling specially selected readers to find out your views in more detail. If you are selected please help us by responding — it's free and it will help us to make *Sinclair User* even more the mag you want ■

THIS MONTH I purchased both *Crash* and *Sinclair User* as they both happen to be my favourite magazine. However, I have come to the conclusion that *Sinclair User* is rapidly overtaking *Crash* in terms of readability and amusement.

At one point in the long history of Spectrum magazines *Sinclair User* to most people conjured up images of stuffy technical tips and the insomnia curing reviewing system — the Gilbert Factor. Even then amid all qualms I purchased it. I bought *Sinclair User* for the technical tips and articles, and *Crash* for reviews.

In the past few issues I've noticed that *Sincliar User* is getting far more colourful and interesting. I think the new review system with the icons and different reviewers smashes *Crash*'s puny attempts to bits and bytes.

The letters on your letters page are obviously written by people with an IQ of above 75 and they have something worthwhile to say whilst *Crash* always prints letters by teenage boys trying to impress their friends by writing witty articles that come across as nothing more than a load of ****.

The contents page at the front is very informative and more readable than *Crash*'s attempt where you have to search the first few pages for the article you want. *Sinclair User* covers every aspect of computing with equal emphasis on each.

I could go on praising your mag, but I'll end by saying that *Crash* is rapidly turning into a glossy, unwitty, commercialised comic for schoolboys. Also your mag is 2p cheaper.

Johanna Daniels
Dinas Powys
South Glamorgan

I AM just writing to say your magazine is the best on the market.

I bought *Sinclair User* first back in June 1985. After that I didn't buy it again for another seven months, because I thought the magazine was a load of rubbish.

Then I bought the February issue of *Sinclair User*. It has changed and what an improvement! The reviews the playing tips and presentation had improved 100 per cent. Then I bought two more issues and stopped becuase I thought *Crash* and *Computer & Video Games* were better. *Computer & Video Games* began to get boring so I bought the August issue of *Sinclair User*. The changes you have made like even better reviews, playing tips including the Facts Box, hardware and overall presentation (like putting software under certain categories) have made me a big fan of your magazine.

Now you are even better than *Crash*. Please don't change because you've hit the jackpot. Also, I love the previews and software chart quoting the price, and your rating of the software not to mention the screen shots.

Anyone who doesn't like the mag now must be bonkers.

Paul Giles
Maida Vale
London W9

I FIRST read you mag at Christmas. It seemed to have more class than *Crash* etc so I ordered it.

Then in the February issue you changed it. OK, it needed colour but not bigger reviews, and you scrapped your brilliant software directory.

By the April issue the Mad Celt's colours were so bright I needed sunglasses. Then in June you went and got rid of Old Incorruptible and the marvellously sarcastic Chris Bourne. Then in this month you mess up a perfectly good Top 30 (and make it a top 20). And what on earth did that lunatic Jon Riglar do to *Zapchat*. To top it all, Gordo Greatbelly, in his column called me a miserable ingrate, and a spawn of a sacramalation slime mould and an Amstrad sideways Rom. Plus in answer to my question he told me a downright lie. You can't knock on the trapdoor. What are you going to do about it Kelly?

David 'Tolkein Fan' Davis
Carryduft
Belfast

●*Gordo has been summoned forthwith to explain himself.*

sinclair user

COMPETITION

A test of the trivial

Are you the most trivial person in your neighbourhood? You are?

Sinclair User in conjunction with Domark Enterprises Inc needs trivial people. The kind of people who can remember the names of Troy Tempest's girlfriend in Stingray or who can say exactly where the Islets of Langerhans are to be found.

If your head is stuffed with totally useless pieces of information — the mental equivalent of junk mail — this could be your big chance.

We have five brand new copies of the incredibly expensive *Genius II Edition Trivial Pursuit* (the board game) to give away.

That's not all, one overall winner will be selected as *Sinclair User's* champion of the trivial and will be invited to take part in the grand Domark *Trivial Pursuit* final.

Whoever wins the final will walk away with possibly the most excessive (shouldn't be that expensive? Ed) prize Domark has ever offered — a solid gold edition of the *Trivial Pursuit* board game worth around £10,000. We're talking serious bananas here.

WHAT YOU DO

Take a look at the questions below. Trivial aren't they? If you think you know the answers fill in the coupon and include a trivial question of your own (with answer). Your question will act as tiebreaker and may be included on further editions of the computer version of the game. Questions — they're difficult

1) What number was never awarded as a Gilbert factor?
2) What animal did Erwin Schrödinger surmise might be simultaneously alive and dead?
3) What was the name of Batman in his undisguised form?

Send your answers and tie break question to: *Trivial Pursuit* Competition, *Sinclair User*, EMAP, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Closing date for the competition is Sept 24th.

Answers

1) .....

2) .....

3) .....

My Question: .....

.....

Answer: .....

Name .....

Address .....

.....

.....

Domark and Emap employees cannot enter.

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.....

SU9

SOON, GAMES AT THE SPEED OF LIGHT....

FTL

FASTER · THAN · LIGHT

JON RIGLAR'S ZAP CHAT

The first game this month is one which has been around for a few months now:

Way of the Tiger

▲ by Gremlin Graphics, who made my favourite game of all time, **Wanted: Monty Mole**. Anyway, here are some assorted tips for the **Tiger**.

Unfortunately, I haven't got a proper copy of the game (there's a hint if ever I've seen one). I get sent down the new releases every month, but I've only got a preview copy of the game which doesn't load. Ho-Hum, at least it's got one of those snazzy large cassette cases. Forward with the tips. **Way of the Tiger** has three sections to it and these tips are for the unarmed combat section.

● The Ninja is a fairly difficult opponent to beat but low punches and kicks usually work fairly well.

● The Goblin can be defeated by low punches, kicks and mid-kicks. When he transforms, mid-kicks and upper-cuts should hold him off. As he jumps through, crouch down to stop his blows getting in.

● The Rhino-Head is very easy to defeat. Stand still and keep mid-kicking him in the chest. He'll try to head-butt you, but do not worry if he succeeds, as he cannot hit you enough times to beat you as long as you keep kicking.

● Finally, the Giant Troll is the meanest guy of the bunch. Wait until he gets close and then mid-kick him and hop backwads immediately. Repeat this until he collapses and dies.

● The Giant Troll can be disposed of by flying kicks. Make a flying kick once to hit him in the upper body and repeat the move to take you out of reach of his punches. Once you've done this, turn around and repeat the double kick. Keep turning and double kicking until he keels over. Doing this is a fairly safe business, nearly as safe as listening to 'lunchbreaks' Bourne's (now sadly moved on to 'the Net') latest lecture about Greek folk music.

Last month, Imagine's **Green Beret** caused quite a stir amongst the cream of Plymouth's top tipsters. And considering the sacks of letters I've received on the subject a lot of other people agree. Many computer buffs wrote in to claim to be the first person to complete the game and I mentioned some in last month's *Zapchat*. Considering I can only get to the end of the third stage, I reckon that all this bragging on about **Green Beret** has gone far enough. I shall mention it no more. Other popular games are **Ghosts 'n' Goblins, Equinox, Spellbound** and **Bobby Bearing** which I'll look at next month. There are a host of **Batman** tips and hints in this edition. Also, if I've got enough room I'll include a heap of **Quazatron** info

James Baldock has sent an infinite lives program for Ultimate's

Cyberun.

▲ Load the program instead of the header on the tape.

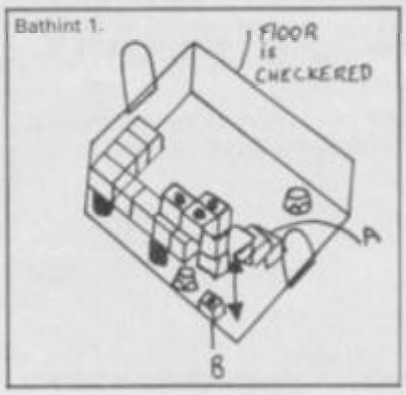
```
10 LOAD "" "" CODE:
   RANDOMIZE USR 24576:
   PAPER 0: PRINT AT 19,0:
   LOAD "" "" CODE
20 POKE 23446, 62: POKE
   23447, 175: POKE 23448,
   50: POKE 23449,72:
   POKE 23450, 141: POKE
   23451, 195: POKE 23453,
   92
30 RANDOMIZE USR 23424
```

Zapchat welcomes Matthew Norman as the official helper for this month. In other words, I will get him to do all the hard work. Norm, known as Norm to his friends, helped me compile the following section which is a guide to Ocean's

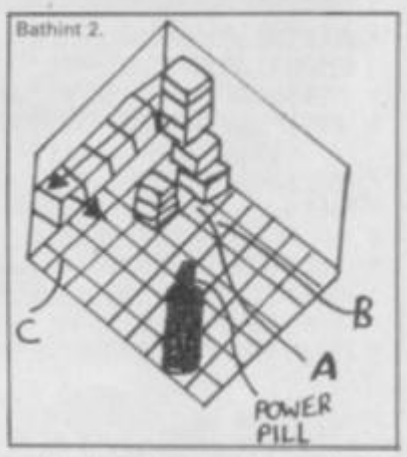
Batman.

▲ He also sent some tips for **Ghosts 'n' Goblins** but I've successfully lost them. If I find them before I finish the edition I'll print them.

● BATHINT 1. Norm and I have compiled the following step-by-step guide, including some terrible diagrams which I claim responsibility for. The room in Bathint 1 is quite tricky and caused me a bit of trouble although once you have mastered it, you'll kick yourself for not seeing it before. Here's our method. As soon as you enter the room go and collect the elephant's foot which is in the corner. Jump up the steps labelled 'a'. Drop the foot on the top step, making sure you get it as close to the pillar as possible. Then go back down the stairs and around to the other elephant's foot. Wait until the nastie labelled 'b' reaches the top and then slowly push the foot under the nasty. Make sure you are out of the way when the nasty starts to come back down. You will see that the nasty lands on the foot and gets stuck. Go back up the stairs and push the foot on top of the nasty. Jump on and then by careful manoeuvering you can jump on to the belt which will take your Batman over to the door and allow you to continue on your quest for the Holy Batcraft.



● BATHINT 2. This room is one which looks extremely easy at first, but can prove very frustrating. Push the cases which are on the floor to position 'a'. Then move

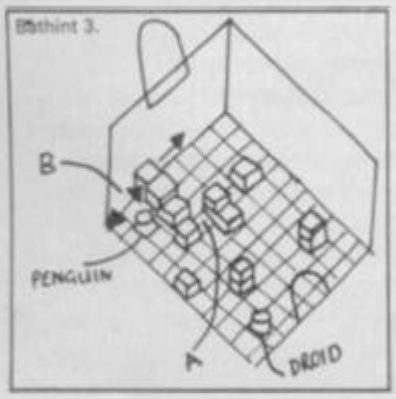


back to the position labelled 'b' and jump toward the conveyor belt and up the cases. Remember not to jump on the steps as these rapidly disappear and you need them for later. Once on the top case, move halfway across so that without making the steps disappear you can push the other cases on to the conveyor belt. However, only push them halfway so they do not move down the belt. Jump off the cases and then push them back to grid 'c'. Go back to the steps and jump up. Keep jumping

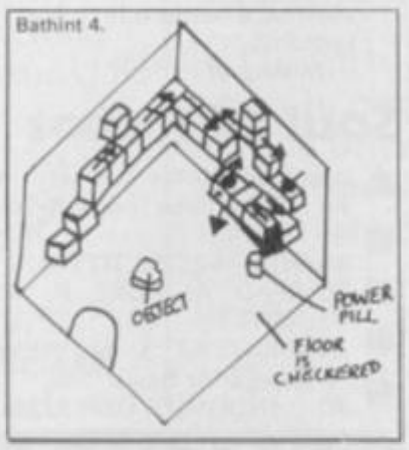
AP
AT

as the steps disappear. Once you get to the top you will find that you have knocked the cases on to the conveyor belt and that they are now trundling happily down the belt. Once they reach the bottom they are forced in the other direction and fall off the belt to land on top of the other cases. By going behind these piled up cases you can now push all six closer to the pillar. Jump up and make a stairway. Additionally, don't put the cases too close to the pillar or you won't be able to make a stairway by jumping up.

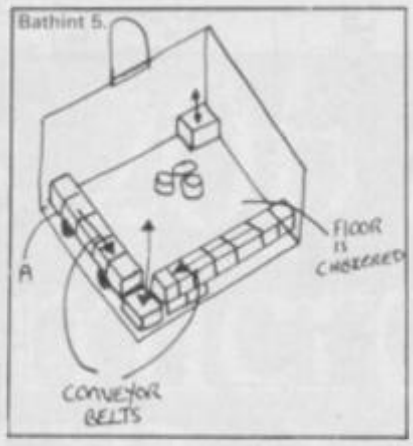
● BATHINT 3. This room is very difficult as the penguin head immediately goes for you when you enter the room. Drop down from the door and wait until the homing droid comes at you. Jump on top and direct it toward the door. You'll see that the penguin is coming for you. Tap the droid around until you force the penguin up and against the stairway. By further fiddling you can get the penguin to position 'a'. Then jump on the stairway when the moving platform is at position 'b'. Keep on jumping up the stairway as the steps vanish. If you've got it right, the platform will be accessible and if you land on it, it will take you to the door. Voilá as they say in Norway.



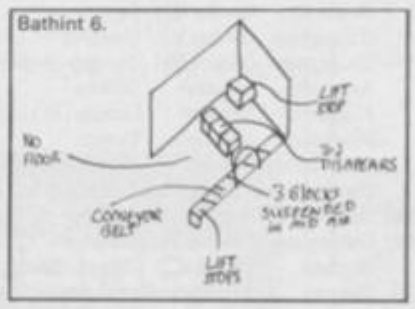
● BATHINT 4. Once found, this is a very entertaining room. It poses a very obscure problem although once you have found the ideal solution, the results are good fun to watch. First of all, get the object which is in the middle of the room. Position yourself at the foot of the steps and prepare yourself for the fact that the steps will disappear. Continually jump so that you reach the top step which turns out to be a conveyor belt. Press the opposite direction key so that you stand still on the belt. Now drop the object so that it travels down the belt and onto the vertical platform. This goes up and is then pushed by the horizontal platform. The object then goes through a very entertaining set of falls and movements until it reaches the bottom, pushing the power pill out so that you can get at it.



● BATHINT 5. There are two methods of completing this room. Method A: once you have entered the room, get one of the objects and place it in position 'a'. Go back and collect another object and by jumping on the first and then dropping the object you can get a sort of staircase from the objects. Then collect the final object and by hopping on the previous two and dropping your object on top, you are then high enough to be able to jump on the conveyor belt. Go along the belt and land on the lift which will take you to the room above and then to Bathint 6. Method B: if you are lucky enough to have collected an energy pill two screens before, then you will know that it is a speed pill. Conserve it until you reach this room and as soon as you enter it turn left and go over to the lift in the corner. You won't get on it straight away, so wait until it comes down and then jump on top. This lift will take you up into the next screen and Bathint 6. However, the room turns out to be the room with your Batbelt in it. Here the lift will stop and you will be unable to go anywhere except back down. However, don't despair, because you have the extra speed pill you can jump to the right and by keeping the key down, you will land on the conveyor belt in the screen below. Holy Socks. The method then should be the same as the previous Method A.



● BATHINT 6. This room is where the Batbelt can be found and obviously your motive is to get it. Here's how: You should have entered the room via the lift and so you will still be going up and down. Wait until the lift takes you higher and then jump towards the platforms in the middle of the room. Watch out, the middle square disappears. Once you've landed on the belt, getting back is fairly steady going as the belt allows your gravitational pull to be halved. Guide Batman back to the conveyor belt nearest the door. Press a direction key which allows you to stay still on the belt. Then jump in the direction until you reach the door. Here, walk into it and you should now have all your bat equipment and be well on your way to completing the game.



OK, so the *Pokes* for

Commando

and

Green Beret

last month didn't work.

For **Commando** in Line 40 replace 2102 with 2126 and in Line 60 replace 65485 with 65094.

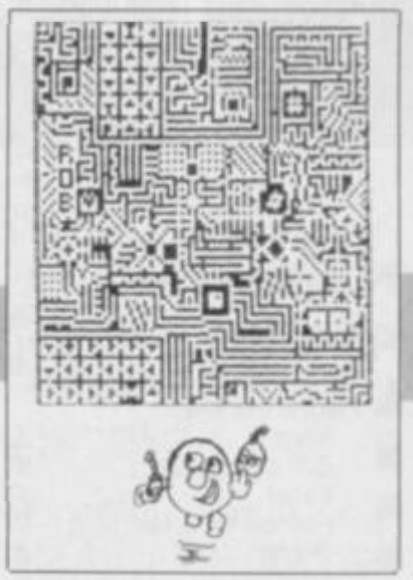
For **Green Beret** add at the end of Line 11 : *Load "" Code*

Fingers have been broken as punishment for those responsible.

Here's a map for Mastertronic's latest budget effort

Molecule Man

▲ in the form of a printout which was supplied by Mark ■ Barnwell, who lives somewhere but I've lost his ■ address. If you can understand it you're a better man ■ than I.



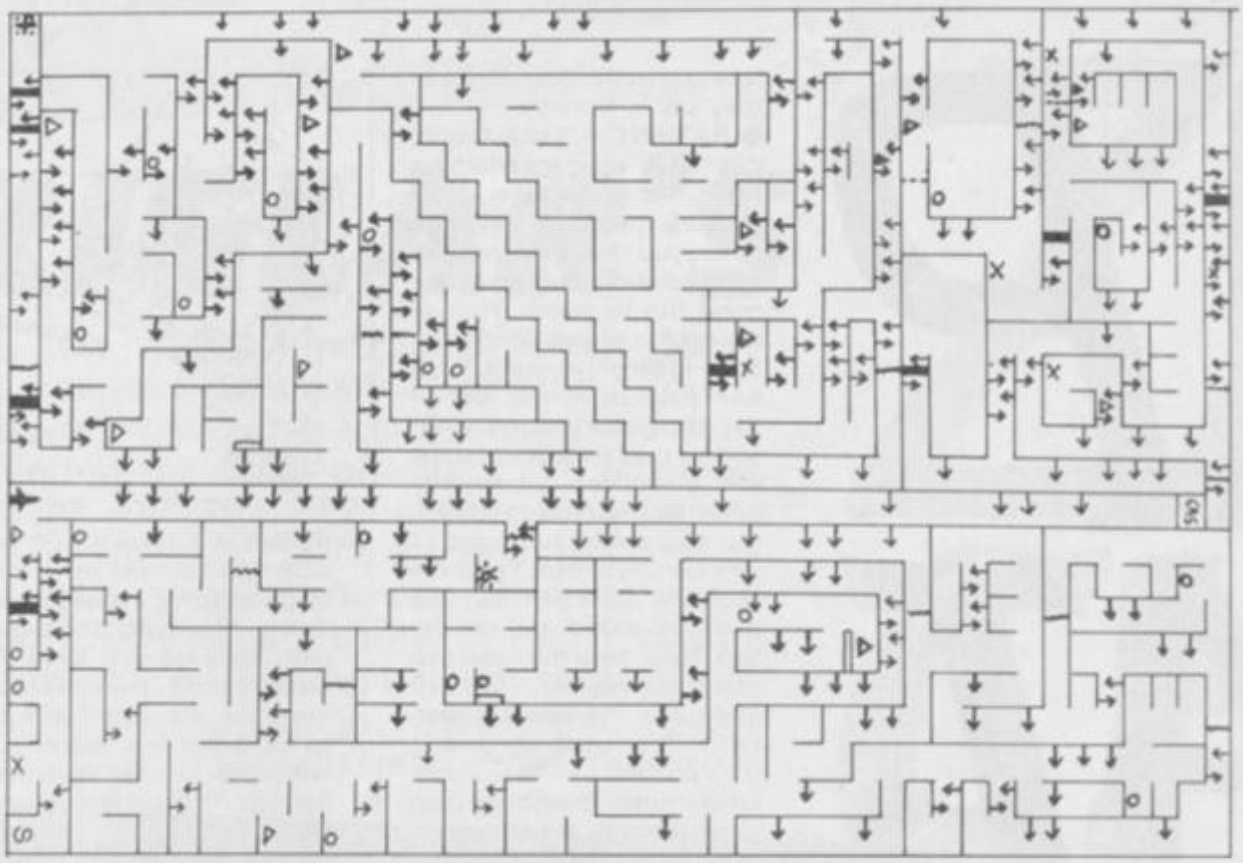
Now here are some tips to help you out in

Spindizzy

▲ from Electric Dreams. To use the clues that appear in the bottom left hand corner, you ■ should find the screen which contains the same symbol ■ and then move on top of it. Once you have done this ■ something will happen on the screen. Either some platforms will appear or disappear. I've been having my ■ fair share of problems with the frustrating game including the fact that I'm hopeless ■ at controlling the gyroscope. There is a room that completely baffles me. On the ■ first section there is a room over to the right that is full of symbols that completely mystifies me.

After last month's really out-of-date *Poke* corner, I've ■ had a lot of letters on the subject of cheat codes. Jon Rose wrote saying: "If K ■ Savage is so good at *Poking* games then why doesn't he ■ have the infinite lives code for **Dragontorc** already?" ■ Jon goes on. "One more thing, please leave Ultimate ■ alone. If it wasn't for them not only would we still be playing **Wet Set Jelly** clones, ■ but it's also highly unlikely that we would have games like **Fairlight, Batman, Wizard's Lair, Nodes of Yesod** etc . . ." On the same ■ subject, Ben Padley from Worksop in Nottinghamshire says nastily: "K Savage eat your heart out." It'll ■ end in tears.

JON RIGLAR'S ZAP CHAT



Col from across the road has just popped in to tell me that if you type in FDD,60, it speeds up his game. As for what game I don't know.

Enough of this trivia nonsense and onward to another map. This one was sent in by A J Reed of Barwell in Leicestershire who says: "I include a map of

Nonterraqueous

for your consideration." Here's the key:

Start	S
Evil computer	✱
Laser	O
Photon thruster	✲
Bomb	▲
Fuel	X
Force field	---
Extra energy	—
Rocket (needs fuel)	▬
Swap modes	↑↓
Energy barrier	Δ

He says: "You don't need an infinite lives *Poke*. Just load the game as normal, then play using the keyboard for control. Drive your Robodroid into a solid side wall, then go up and down touching the wal and alternating between the same two screens until your energy is up to your requirement, then carry on as normal. When you next run low on energy simply repeat the process on any two screens you like. Don't build your energy up above 999 or your droid will explode and beware of one-way walls (shown crosshatching on the map). One in particular is a trap and you'll have to restart. You don't need to swap to defenceless mode to finish the game but make sure after you have the fuel for the rocket you've got a couple of bombs in hand or you will be trapped.

"When you complete the game you are told the sequel will be called **Terraincognita**. **Soul of a Robot** must have seemed a better title to Mastertronic.

Talking of

Soul of Robot

Jason McCarthy has sent in an infinite lives program for it:

```
10 FOR P=23296 TO 23329
20 READ A: POKE P, A: NEXT P
30 PRINT AT 3, 5; "Start tape after Basic"
40 RANDOMIZE USR 23296
50 DATA 17,0,221,33,0,64,62,255,55,205,86,5,17,88,152,221,33,156,99,62,255,55,205,86,5
60 DATA 62,???,50,212,100,195,156,99
```

Enter the number of lives you want in place of the ??? in Line 60.

Whatever you want to say, say it to: Jon Riglar, *Zapchat*, *Sinclair User*, 30-32 Farringdon Lane, London EC1R 3AU.

Quazatron

M O'Doherty has written to say he's drawn up the following chart:

Droid	Class	Drive Unit	Power Unit	Weapon	Chassis	Devices
A1	ALPHA	Ultragrav	Cybonic Mk2	Autocannon	Coralloy Mk2	Laser Shield
AB	ALPHA	Ultragrav	Cybonic Mk2	Autocannon	Coralloy Mk2	Ram Thruster
C1	ALPHA	Ultragrav	Cybonic Mk1	Disintegrator	Coralloy Mk1	Power Boost
C2	ALPHA	Dual Linear	Cybonic Mk1	Disintegrator	Coralloy Mk1	Detector
C3	BETA	Dual Linear	Cybonic Mk1	Disintegrator	Coralloy Mk1	Overdrive
ST	BETA	Dual Linear	Cybonic Mk1	Disintegrator	Coralloy Mk1	Disruptor Shield
S2	BETA	Heavy Duty	Triobatic	Autocannon	S.Plasteel	Detector
S3	BETA	Dual Linear	Triobatic	Autocannon	S.Plasteel	Detector
S4	BETA	Heavy Duty	Triobatic	Disintegrator	S.Plasteel	Detector
C5	BETA	Heavy Duty	Triobatic	Disintegrator	S.Plasteel	Disruptor Shield
B2	BETA	Heavy Duty	Triobatic	Disruptor	Coralloy MK1	Disruptor Shield
L2	BETA	Heavy Duty	Robotronic Mk3	Disintegrator	Plasteel	Overdrive
S6	BETA	Gravitronic Mk2	Robotronic Mk3	Disintegrator	S.Plasteel	Detector
B3	GAMMA	Gravitronic Mk2	Triobatic	Disruptor	S.Plasteel	Disruptor Shield
B4	GAMMA	Gravitronic Mk2	Robotronic M3	Disruptor	S.Plasteel	Laser Shield
L3	GAMMA	Gravitronic Mk2	Robotronic Mk2	Dual Laser	Plasteel	Power Boost
L4	GAMMA	Gravitronic Mk2	Robotronic Mk2	Dual Laser	Plasteel	None
00	GAMA	Gravitronic Mk2	Robotronic Mk1	Pulse Laser	Plasteel	Power Boost
L5	GAMA	Gravitronic Mk2	Robotronic Mk1	Pulse Laser	Plasteel	None
L6	DELTA	Gravitronic Mk2	Robotronic Mk1	Pulse Laser	Plasteel	Power Boost
B5	DELTA	Gravitronic Mk1	Robotronic Mk2	Autocannon	S.Plasteel	Ram Thruster
B6	DELTA	Gravitronic Mk1	Robotronic Mk2	Disintegrator	Coralloy Mk2	Laser Shields
B7	DELTA	Gravitronic Mk1	Robotronic Mk2	Disintegrator	Coralloy Mk1	Ram Thruster
R5	DELTA	Linear Mk3	Chemifax Mk2	Dual Laser	Chromite	Disruptor Shield
R6	DELTA	Linear Mk3	Chemifax Mk2	Dual Laser	Chromite	None
R7	DELTA	Linear Mk3	Chemifax Mk2	Dual Laser	Trialium Mk2	None
R8	EPSILON	Linear Mk3	Chemifax Mk2	Pulse Laser	Trialium Mk2	None
U7	EPSILON	Linear Mk2	Chemifax Mk1	Pulse Laser	Trialium Mk2	None
U8	EPSILON	Linear Mk2	Chemifax Mk1	Pulse Laser	Trialium Mk2	None
U9	EPSILON	Linear Mk1	Chemifax Mk1	None	Trialium Mk1	None
X8	EPSILON	Gravitronic Mk2	Chemifax Mk1	None	Trialium Mk1	None
X9	EPSILON	Linear Mk1	Chemifax Mk1	None	Duralite	None
KLP-2		Linear Mk1	Chemifax Mk1	Pulse Laser	Duralite	None

Poke Corner

THE following *Poke* corner was stocked up with up-to-date sizzling pokes by Ben, Paul Kelly (no relation to the Ed I hope), Greg Lomas, James Baldock and me. Here we go and chocks away etc . . . Cheat codes for quick reference; note: Ninety-nine per cent of these *Pokes* are designed to be placed in the Basic header and to be put in front of a *Randomize Usr* statement.

Saboteur	**:Poke**	**29894,0 — Infinite lives**
Sai Combat	**:Poke**	**65364,201 — Infinite lives (enter both pokes)**
	Poke	**32421,1**
Sweevo's World	**:Poke**	**33219,0 — Infinite lives**
	Poke	**37008,*n* — Extra lives (n equals chosen number)**
Trans Am	**:Poke**	**28610,0 — Makes game harder**
	Poke	**98573,0 — Makes it even harder**
Lunar Jetman	**:Poke**	**37999,201 — Destroys all enemies**
Attic Atac	**:Poke**	**37260,175 — Allows doors to open quickly**
Pentagram	**:Poke**	**49917,0 (before last *Rnd Usr*) — Infinitive lives**

For all of you who are unsure about fiddling games, here's an example. Take the Commando **cheat program printed in last month's edition. Load in the header program from your original of** Commando**. Stop the tape. *New* the computer and type in the short cheat program. Once you have done this, type *Run* and watch the screen. If nothing happens, something's gone wrong. If the loading borders appear then play your tape ■**

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COMPETITION

WINNERS

Here are the Hobbit winners from August:

Christopher Slink, Northants; Andrew Green, Essex; Gerard Corry, Leicester; Justin Menhenett, West Sussex; D Storrie, London SW18; S Banks, Essex; Sam Estall, London SW18; Nigel Richardson, Sutton; Stephen Thompson, Cumbria; Ian Hunt, Purley;

Want to know if you won the Split Personalities competition in July?

First prize winners:

J A Gorry, Liverpool; Bill Allender, Sevenoaks; A Cunningham, Tiverton; Nuno Ferreira, Portugal; Barry Duffield, Oxford; W fiddler, Cambridgeshire; Dave May, London W4; John Liddell, Glasgow; Brian Thorpe, Gosport; Chris Jackson, Chesterfield

500 runners-up:

A Turnball, Rugby; D Allen, Solihull; Mr Ungki, Indonesia; M Shewan, Aberdeenshire; Justin Thorne, Brighton; Michael Lok, London N1; Mike Tahtinen, Finland; Simon Jones, Manchester; J E Michel, Macclesfield; E Howarth, Lancs; Mark Battle, Dublin 1; Paul O'Brien, Glasgown; Steffan Sainchez, Chelmsford; Christopher Grahn, Sweden; Q Harden, Wingarde, Surrey; C Herbert, Zimbabwe; S Jones, Eastliegh; Chris Sanderson, Cheshire; E Hawkins, Edinburgh; Paul Baylock, Birkenhead; Martin Lewis, Scotland; Alan Dewey, Sheffield; Michael Elinskas, Herefordshire; Amir Dekel, Israel; Alan Doggett, Ipswich; J Whittaker, West Yorkshire; Alan Williams, St Albans; Richard Tuff, Chatham; Andrew Moss, Newbury; James Balcock, Cambs; Cherry Bennett, London SE13; Karl Butcher, Essex; Robert Hardy, Derbyshire; March Wills, Kent; David Price, Canvey Island; M Major, Andover; Paul Green, York; Raymond Davies, Rudry, Mid-Glamorgan; Richard Day, Walsall; Brian Southen, Kent; A Giblin, North Watford; David Davis, West Midlands; Andrew Berry, Morecambe; James Auld, Wilts; S Romain, Chippenham; John Camp, London; Stuart Smith, Chelmsford; Clive Murray, Eastbourne; Ian Wilson, Thurso; Louise Benson, Cumbria; Andrew Wooton, Birmingham; M Lantair, Bristol; Gareth Thomas, Salisbury; Aled Marks, Maester, Mid-Glamorgan; Richard Hayes, Cardiff; Simon Roe, Harpenden; A Crittenden, Kent; Jan Kolbaek, Denmark; T Astbury, Wirral; Mark Russell, Mid-Glamorgan; Brian Gordon, Ayrshire, Scotland; Tarquin Lubran, Dyfed, Wales; Paul Angeloni, Fife, Scotland; J Bryant, Northampton; D Duffy, Lancs; Robert Phillips, Cambs; Carlos Neves, Portugal; Duncan Harvey, Norwich; Stephen Noble, Fraserburgh, Scotland; J Phillips, Ledbury; M Shrimpton, Beckenham; Jake Taylor, Bolton; N Chappell, Andover; Neil Coomes, Hayes End, Middx; R Davies, Middlesborough; Jennifer Radford, Staffs; Guy Everitt, Devon; G Hodkinson, Dartford; Mark Davies, London SE9; G Francis, Braintree; Dave Smith, Slough; Barry Lincoln, Co Londonderry, Northern Ireland; Craig Rollitt, Sheffield; 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Stelios Ballios, Greece; Samantha Reed, Bracknell; Kevin Lloyd, Caernarfon; Nathan Smith, Bristol; Stephen Catt, Bridlington; Karn West, Andover; John Connolly, Worsley; Kevin Clark, Angus, Scotland; C Seymour, Teddington; Neil Morgan, West Midlands; David Beck, Essex; R Batty, Kettering; Jonathan Partington, Lancs; David Curson, London SE24; Craig Mitchell, Rotherham; D Whitehead, Cheshunt; Gary Richardson, Gateshead; N Wilson, Milton Keynes; C Thirkettle, Humberside; L/CPL Turner, Hants; Andrew Pursell, Aberdeen, Scotland; Graham Utton, London E4; M Peutherer, Huddersfield; Jamie Sells, Beccles; Chris M, Sheffield; Lars Maehle, Norway; Michaerl Porter, Hull; K Bailey, Hastings; Andrew Warner, Surrey; Steve Mitchell, Lincoln; Anthony White, High Wycombe; Paul Kelly, London SW1; Chris Baldwin, Newport, Gwent; Chris Butcher, Guildford; S Tatham, Western Isles; Paul Hancock, Ferryhill, Co Durham; Miles Tighe, Netheralon, Wilts; M Caygill, Rickmansworth; D Overy, Winchester; Neil Gunn, Edinburgh; 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Lennart Jideblad, Sweden; R Loader, Wilts; K Durrans, Cheshire; Stewart Caig, Sussex; Kenneth Anderson, Scotland; Richard Curtis, West Midlands; Christopher Shaw, Staffs ■

XARQ

One by the RamJam corporation, whose arcade games are usually inventive, if not technically astounding.

Both comments are true of **Xarq** which is visually a rather simple arcade game — dated even — but has a clever plot and plays well. I'd tend to describe it as infuriating, but one person's infuriating is another's addictive.

The usual nonsense but pretty good nonsense. A giant floating base called **Xarq** has been built on Xargon — a world with no natural land masses. The enormous base is self regulating and self reproducing, it grows. Now we all know what happens to vast computerisd land masses when our collective human back is turned — you've got it — they go wobbly and start threatening all life as we know it.

With only your Nik Nik/Hi-Speed Hydraboat (complete with lasers, depth charges, guided missiles and mortars) to help you, your mission is to penetrate the **Xarq** defences and pilot your way towards the inner central power reactor.

The ship is controlled in the same manner as the spaceships in asteroids — accelerate, decelerate, turn clockwise/anticlockwise. Lasers fire in front of you, guided missiles have to be set a range by holding down a key but can be steered in the right direction, mortars work like guided missiles in ranging but can't be controlled once released.

Xarq is built in concentric tiers around the Zimmermand Trenches. To move into each level of **Xarq** you must first destroy the lock gates which hold back the sea, this causes the trenches to flood and so allows your boat to travel deeper into the land mass.

Things that can usefully be blasted are revealed by coloured beacons. Aside from the lock gates, there are power field generators which can be disabled, laser field generators and gun emplacements.

Xarq defences aside from gun turrets include torpedoes, sea mines, and air attacks. These defences are so good you may well become completely irritated with the game, as I did, but I guess if you stick at it. . .

Graphics and sounds are effective but very simple. **Xarq** is constructed from a vast number of large squares using a set number of designs. It looks a little like the maps associated with wargames. Sound is blips and whizzes with a sonar 'boing' when a sub is in the area.

Seekers of the state of the art won't be impressed ■

FACTS BOX

Quite original, certainly challenging. You'll find it either addictive or irritating. Not state-of-the-art, however

★

XARQ
Label:
Electric Dreams

★

Author:
RamJam

★

Memory:
48/128K

★

Joystick:
Sinclair or Kempston

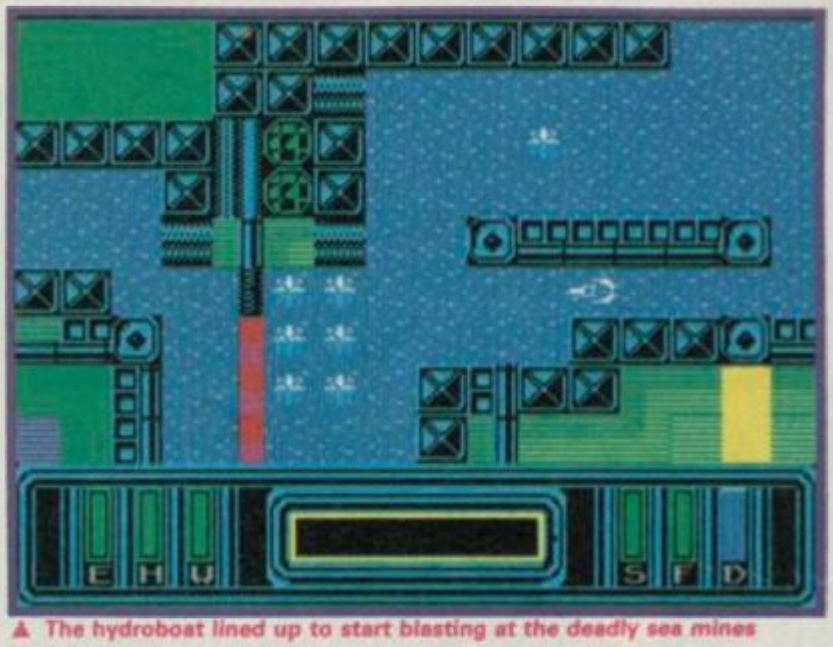
★

Reviewer:
Graham Taylor

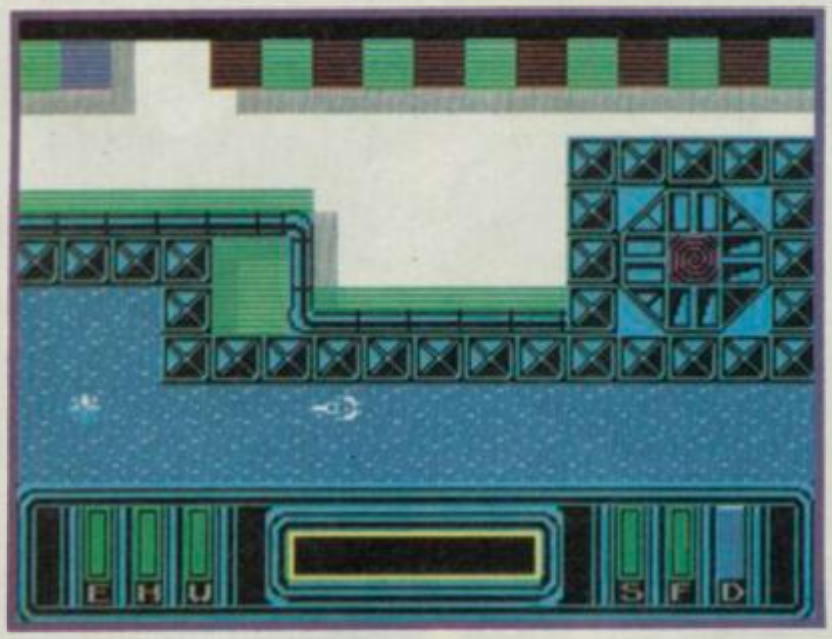
PLAYING TIPS

- Stick at it. Eventually you will begin to last more than three seconds
- Many of the defensive gun emplacements have a blind spot which they cannot hit you and from which you can destroy key installations
- Subs reveal their presence by a sonar 'ping'. If you hear it drop depth charges immediately. You cannot outrun a torpedo for long
- Pay close attention to the status indicators at the bottom of the screen — you may not otherwise realise that your shields are out
- Learn the map of Xarq. In particular, take care to note the positions of the sea mines — don't rush into the next screen until you know what to expect

ARCADE REVIEW



▲ The hydroboat lined up to start blasting at the deadly sea mines



◀ The spiral is a key site • Knock it out to flood the trenches

SOFTWARE STAR RATINGS

All software reviews carry a star rating, the basis of which is value for money programming, graphics, speed, speech and sound presentation and addictiveness

★★★★★
Solid gold. Buy it

★★★★☆
Well worth the folding stuff

★★★☆☆
Pretty average Buy if desperate

★★☆☆☆
Very poor. Probably over-priced too

★☆☆☆☆
A total rip-off. Complain loudly

Each review carries an icon which shows the type of software.

Arcade is for animated games, which in general, reduce the life span of your joysticks.

Toolkit covers programming utilities which improve the quality of home-made software or packages which make machine code easier to write.

Work Out, software which can be used in the home, such as car maintenance or home finance.

Strategy and Simulation are games where thought, planning and judgement are the principle skills required.

Adventure includes either graphic or text adventures.

DARK

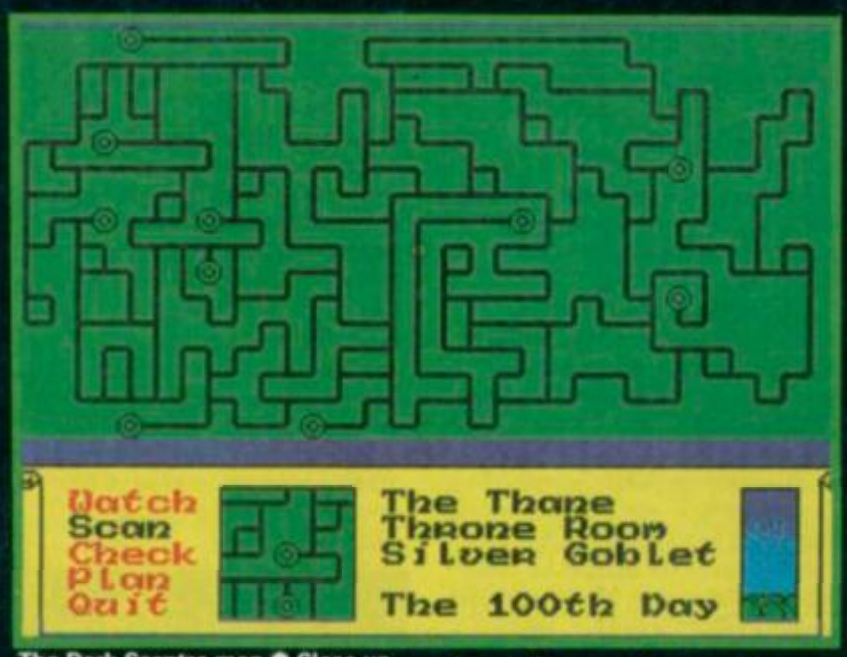
When Mike Singleton wrote Lords of Midnight he presented the computer press with a dilemma. They knew they liked what they saw but what was it exactly, an arcade game? An adventure? *Dungeons and Dragons* without either dungeons or dragons?

Mostly people hedged bets and called it an arcade strategy game.

Dark Sceptre is Mike's latest creation and it poses as many problems of description as Midnight. Arcade strategy game may have to do.

One thing is certain though, Dark Sceptre is an extraordinary program.

It begins, like all the Singleton excursions, with a story. The theme is familiar: yet another land where peace and tranquility have just been swept away by a bunch of total yobbos. This time its the Lord of the Isles v the Northlanders no falls no submissions.



The Dark Sceptre map ● Close up details in the bottom window ● Icon to right shows night falling

The Northlanders are the dark forces, unwittingly given power by the Lord of the Isles (a good guy with a throne of pearls, jade and amethyst) when he forges the Dark Sceptre, the most powerful weapon the mythical world. You join in when the forces of evil have just totally gained the upper hand, become completely dark and shadowy (this is very bad) and when winning is not going to be easy. Actually its going to be almost impossible. . .

Grab that Dark Sceptre and destroy it. Sounds enormously difficult? It is.

You control a company of warriors each with different skills which you must exploit. This task involves battling with the Shadow Lords and dealing with the other computer-controlled forces which begin the game in a neutral frame of mind towards you but may not stay that way depending on when you do.

Before you confront the Sceptre you need to take certain precautions lest it destroys you.

For a kick-off you need to find out what on earth you need to do with it.

It's possible to play the game in a number of ways. It is perfectly possible for a group of people to each control a warrior and act independantly through all the same side). However you should always remember that your warriors are free to leave the company and join another should they wish. Similarly you can recruit warriors who desert from other companies.

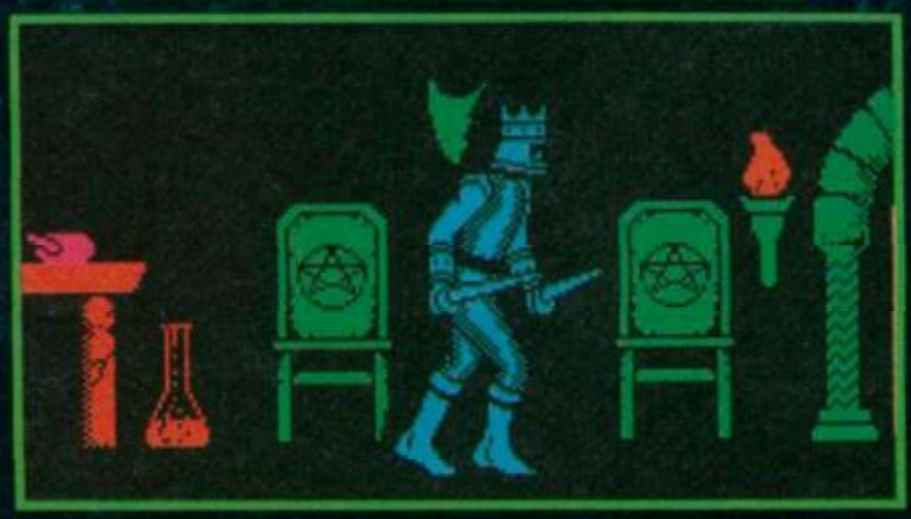
Fundamentally Dark Sceptre is a strategy adventure. You issue orders to your 'troops' using your tactical judgement to decide what to do with whom at what point.

What makes the game special though is partly the range and subtley of the orders you give and more obviously the staggeringly impressive animated graphics. The warriors in Dark Sceptre are not splodgy sprites half an inch high — they are half a screen high yet animated with almost the same smoothness as the characters in Tir Na Nog.

Every order you issue is acted out on the graphics screen by those enormous figures on a highly detailed scrolling background. The effect is astounding.

It's not just the characters that are huge. Only when you flip to the map screen do you realise just how big the game is. The playing area is 4,000 screens or so and the

Deep in the forest lurks the Reaper (*Below*) The Thane is the commander and must not be captured ▼



SCEPTRE

permutations of play are virtually limitless. With a team of warriors that may change through recruitment or desertion at any time, you will need to be flexible about the way you play the game. Should you end up, for example, with a team consisting largely of mystics, it's a good plan to avoid too much strong arm stuff. Things are far from easy to juggle. The more useful a team member is to you the more likely it is he'll be poached by one of the other teams.

Orders to your team are given using a joystick-controlled scrolling menu system. Almost all orders are directed at a particular warrior and concern his dealings with some other warrior. Some orders are generally available, others specifically require some condition to be met. To give you an idea, an order involving spell casting will only work with a warrior possessing magical skills. All quite logical when you work it out, but pretty hairy when you've having to think on your feet.

Having issued orders to the company you then wait for events to unfold. In a curious way this element of the game is not unlike Football Manager in the 'managerial' excitement it generates! You think, you plan, you scheme but as the events unfold following your actions you keep your fingers crossed and hope you haven't done anything stupid. If so there's nothing you can do once you set your 'move' going.

Wot no *Classic*? Well, at the time of going to press Mike Singleton was still tweaking the final elements of the game. For that reason we've held back on stars and *Classic* label.

For the moment . . . ■

FACTS BOX

An astounding complex game that also features the largest, most highly detailed characters ever

Label: Beyond
Author: Mike Singleton
Price: £9.95
Memory: 48K/128K

Reviewer: Graham Taylor

An angel weeps as Thane searches on for the Dark Sceptre ● (*Below*) The Huntsman can search houses for useful objects ▼

GRAPHICS AND SOUND

Imagine Tir Na Nog writ large and featuring multi- rather than single-colour graphics and you have some idea of the look of Dark Sceptre. Enormous, distinctive figures — probably the biggest sprites ever seen on the Spectrum — stride and fight their way along roads, through towns, past forests. The backgrounds are full of strange gothic details, like a statue of a cowering angel, gravestones and religious symbols. The forests are gnarled twisted trees — all is darkness and gloom. The scrolling scene takes up the top two-thirds of the screen.

The bottom third of the picture is filled by a scroll showing current position, character under control and time of day (via a very nifty 'darkness falling' icon).

In some ways the sound on Dark Sceptre is the biggest revelation. Somehow Mike and his programming team have managed to include not only some incredible digitised speech at the opening of the game but stunningly realistic sound effects throughout. Somehow the spectrum *Beep* is persuaded to sound like the hollow clink of steel against steel — for quite some while I assumed I was playing some special 128 version of the game which utilised that machines' enhanced sound facilities. I wasn't.

The animation when either *walking or fighting — of the* various warriors is flawless as is the scrolling of the background detail. Attribute problems, you ask? Not a one.

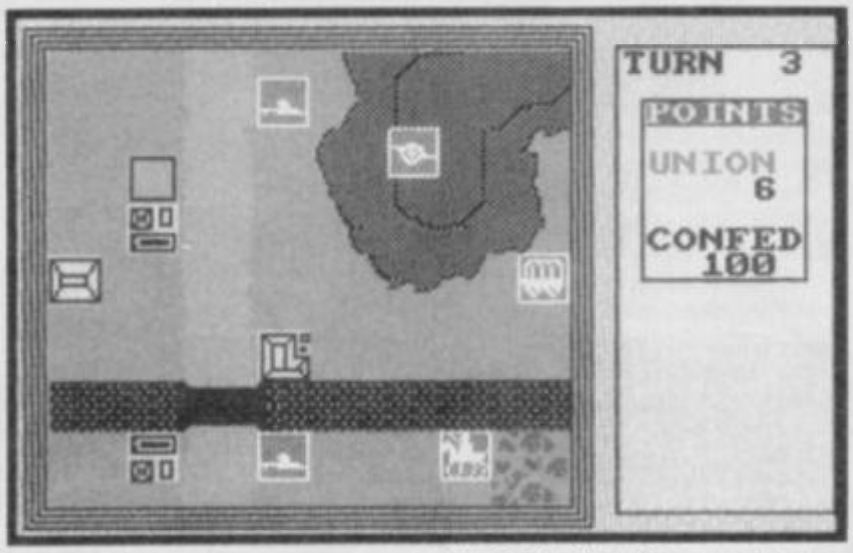
ADVENTURE PREVIEW

Mike Singleton, master of finding a way around seemingly impossible problems, has developed the creative use of shadow for Dark Sceptre. Each figure is surrounded by a permanent fuzzy area of black, which gives the illusion of shadow — as though the figure were lit from behind your head. As a visual illusion I'd give it seven out of ten but as a way of avoiding attribute clash it works perfectly. Brilliant.

STRATEGY SIMULATION

REVIEW

JOHNNY REB II

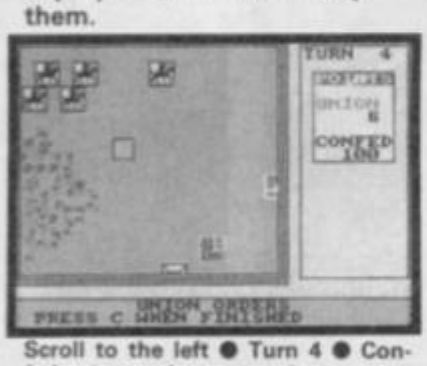


Turn 3 ● By the bridge over the river ● The icons show Union infantry ● Artillery, supply train and cavalry

If you're a wargames fan, then I can wholehartedly recommended Lothlorien's latest — Johnny Reb II. It's a great little game.

I admit I approached this particular program with some trepidation. Lothlorien games have never particularly appealed to me in the past. It turns out, though, to be uncomplicated and challenging, with enough options to provide a considerable play time. Play is either against the computer or a human opponent.

To begin with, the historical background. It's the beginning of the American Civil War. Everybody's got nice shiny uniforms and guns, and they're raring to try them out. The Confederate forces are advancing on Washington and a smaller Union force is deployed at Bull Run to stop them.

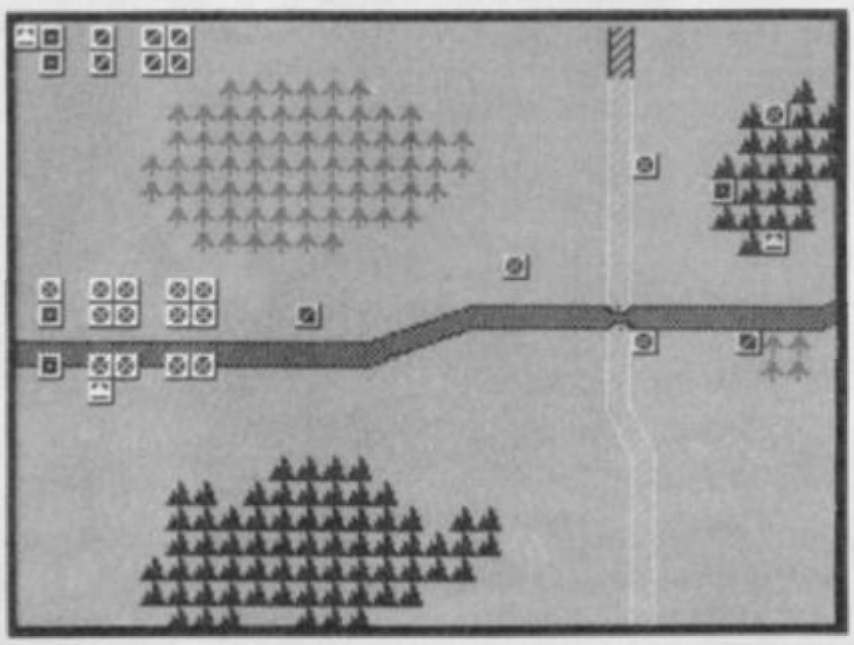


Scroll to the left ● Turn 4 ● Confederate cavalry regrouping

The actual battle was a disaster for the over-confident Union forces — now it's your turn to try to rewrite history.

Ignoring the set-up menu for now and on to the game proper. The screen is divided into two parts. On the left is a window which scrolls around the battlefield giving you detailed information on where troops are, what the terrain is like and so on. The map graphics are good. If you shift the window about the battlefield you can see that the Union forces are defending a bridge over a river. The river runs top to bottom of the battlefield, and a road runs from left to right. The Confederate player scores by leaving the battlefield on the right; the Union player scores by halting the opposition. Also on the map are woods, hills and houses. Houses and woods are good for hiding in. Hills mean you can fire over people.

Finally, you can also see various unit icons: black figures drawn on fairly large squares, about four characters to a side, grey for the Confederates, blue for the Union. The figures depict what type a unit is — man with a musket for infantry, man on horse for cavalry, wagon for supply train, cannon for artillery — and also what the unit is doing at the moment. For example a man with a levelled musket means the unit is firing. Musket at high port means the unit is advancing, etc.



The complete playing area ● Shows areas of woodland ● And hills

When you've moved the on-screen cursor over a unit, either using keyboard or joystick, you can get details about it. Below the map window, you get the name of the unit, and then a list of categories — type, strength, ammunition, morale and experience. How high a unit rates in each of these categories is effectively shown by a colour code; green is usually good, grading down through yellow to red.

When you've got the cursor over a unit icon, you can give orders. Hit the Order Key/*Fire* button and, to the left of the map window, you get information on what that unit is doing now. Hit it again, and you get the various different icons for the actions that unit is allowed to perform. Now use the joystick to choose the one you want it to do next, and hit *fire*. If you order an advance or charge, the game will ask you to show on the tactical map, using the cursor, where you want the unit to advance or charge to. Likewise, if you tell it to fire at something, you have to move the cursor to show where.

The units will actually perform their orders on screen. One which is firing will fire (little bangs from the Spectrum), then reload (the icon changes to show a figure reloading a musket), then fire again. Rather a nice effect. Obviously, if you fire at something you hope to cause casualties. You can only give orders to your own troops of course, and if you put the cursor over an enemy unit you can only get the most basic information.

You can also access a strategic map, which is two screens wide: this shows you where all the units are on the battlefield, although you can only see what side they're on, not what they are.

I played with the basic default game against the computer as the Union commander responsible for the defence of Washington against the Rebs. The computer took the role of the Confederates.

I didn't have any idea at the beginning of the game what the control keys were so my outlying pickets were overwhelmed before I could give any orders. But let me tell you, once I'd assumed the reins of command I gave those Rebs a talking to! It wasn't long before I had them running off the battlefield. OK, so they were running towards Washington and the Confederates had managed to score well over 300 to my 126, but those are minor details!

As a final nice touch you can add new units, defining strength, type, morale and placing them on the battlefield or defining where they come on and when. You can also add new features to the battlefield; fences, stone walls, and extra houses. These all make it easier for the Union forces to defend: to compensate for this the Confederates get bonus points.

FACTS BOX

A winner for the strategy gamers. Smoothly programmed, easy to get to grips with

☆
★
★
★
★

JOHNNY REB II
Label: Lothlorien
Price: £9.95
Memory: 48K/128K
Reviewer: Gary Rook

Johnny Reb II is one of the best three wargames I've seen for the Spectrum (the other two are Arnhem and Desert Rats by CCS).

It's well presented, and terrific fun to play. I hope whoever wrote it had the sense to create an authoring system, because I'm going to be clamouring for more ■

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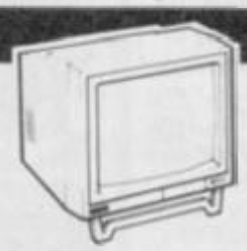

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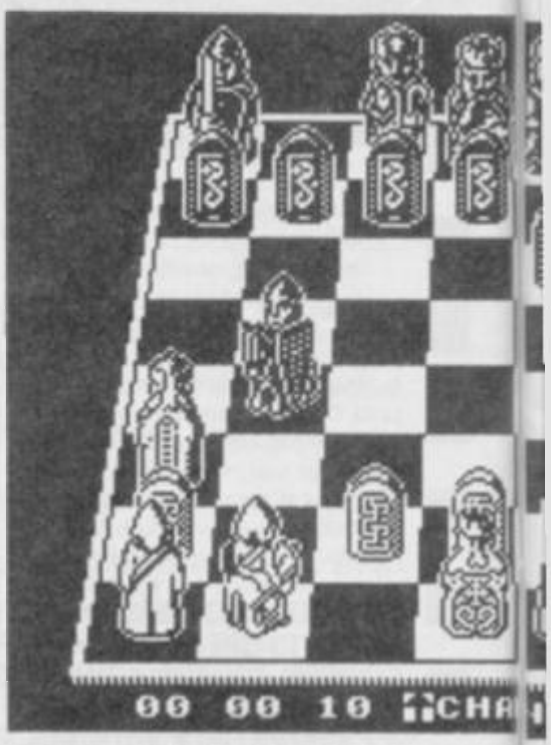
STRATEGY SIMULATION

REVIEW

PSI CHESS



FACTS BOX

A cracking good game of chess with wonderful graphics. Suitable for beginners and experts alike

PSI CHESS
Label: The Edge
Price: £9.95
Joystick: Kempston, Sinclair, cursor
Memory: 48K/128K

Reviewer: Clare Edgeley

★★★★★

With Kasparov and Karpov battling it out in the World Chess Championships the oldest wargame is in the news.

There are several excellent chess programs around and the latest from The Edge is a marvellous anc complex affair, suitable for beginners and experts alike. It certainly makes a Karpov-like opponent.

Psi Chess makes no attempt to explain the rules of the game (there are plenty of books which do just that) but the program understands such features as the 50 move rule, underpromotions and castling, as well as having a number of difficulty levels.

Initially what appeals is the way it looks. It's beautiful. You can choose to play in 2D or 3D (there are no attribute problems), orientate the board to look at it from all four sides, and best of all, choose whether to play with the traditional Staunton set or the more ornate Isle of Lewis set. The Staunton pieces are easier to see, but both are well depicted. The Edge even has plans to put other chess sets on tape, which can be loaded into the game.

The instructions are long, but easy to understand, and as a rank beginner I found it surprisingly easy to start playing. You're given a choice of how to enter your moves too — from the keyboard or joystick. I found the joystick easier, using the arrow cursor to pinpoint first the piece I wanted to move and then the square it's to jump to. If you prefer you can enter your moves in the conventional manner by typing in abbreviated instructions. For instance, 'pawn to Bishop four' would be expressed as C2-C4.

SINCLAIR USER CLASSIC

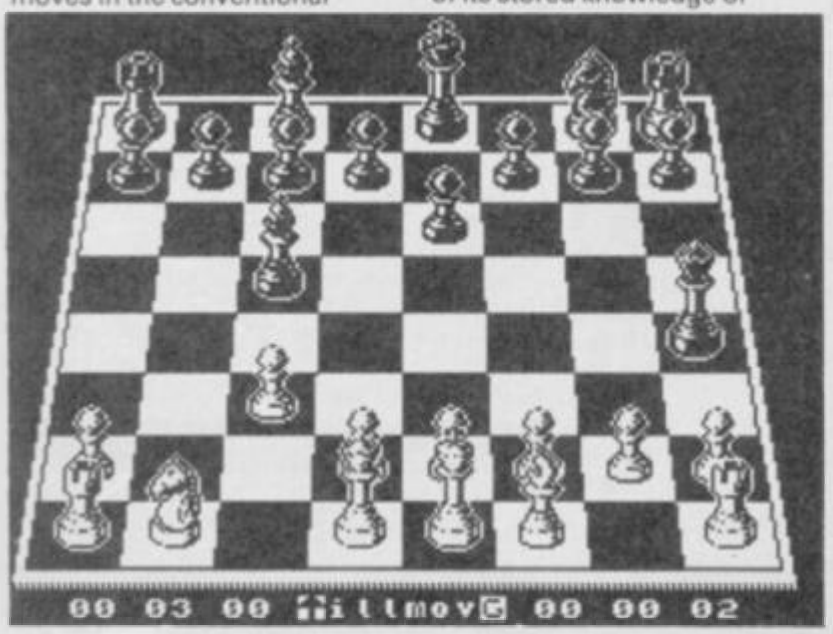
So the battle begins. In fact, I was no match for the computer even on the beginner's level, much as I enjoyed myself, so armed with a book I switched to A3 (a higher difficulty level where the computer makes use of its stored knowledge of strategies) and tried the opening moves of the Sicilian and French Defences. For the first time I was in a winning position, with the computer making its moves according to the book. Then it decided to change things and within a short time it was Checkmate again.

You can learn from the game too, something I found particularly appealing. If you're a beginner and you try to make a move that would put you into check, the computer throws up 'illegal move' and won't let you make it. that encourages you to study the board to see what would have happened had you made the move.

There is also a facility to check over the last moves you've made by using one of the key modes. (There are three main modes which, with a combination of keys, allow you to use and alter the game's many features. You can then scroll forwards and backwards through you last moves either on the board or in chess notation. If also builds up the game in this algebraic form so you can review all the moves. It would have been useful if your and your opponent's moves were recorded down the side of the screen while play's in progress, that way, you could see at a glance just what your opponent's last moves were. Still, you can always refer back.

A two-player game — rather than one against the computer — is possible and the facility to change the orientation of the board comes in useful at this point. . . You can also choose whether to play black or white and can even handicap an opponent by allowing him/her less time to make their moves.

There are many other features. You can save games, change *Border*, *Ink* and *Paper* colours, and set games up with the pieces in various positions

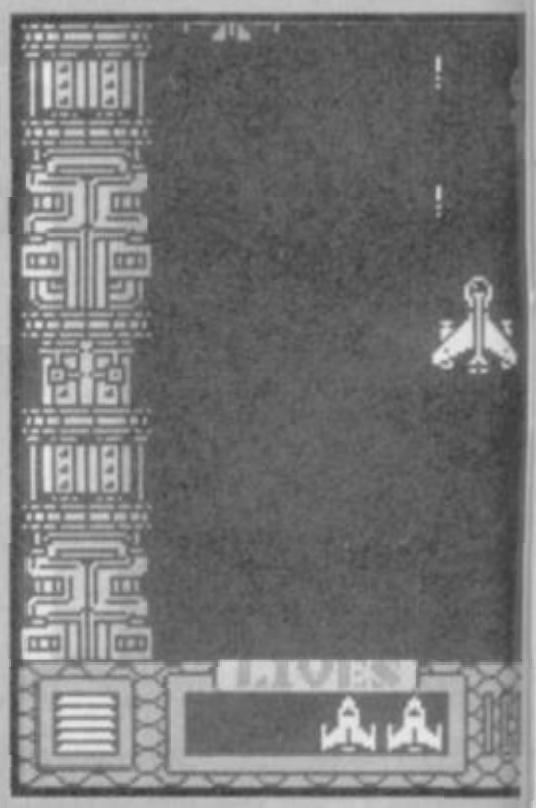


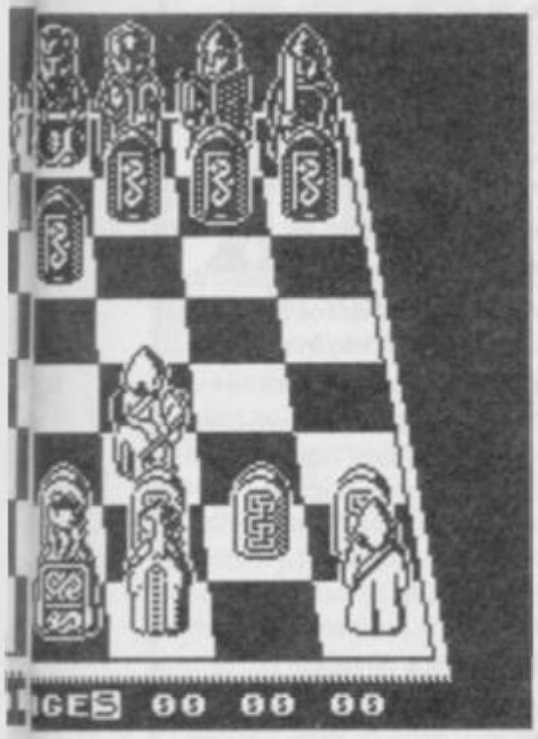
I.C.U.P.S.

ICUPS — International Commission for Universal Problem Solving — has got rid of the infamous Charlemagne Fortheringham Grunes, and has got another sucker to do its dirty work — yup, it's you.

Very different from the slick graphics of **Nodes** and **Arc of Yesod, ICUPS** is really two games in one, both shoot 'em ups — their only link being the rather tenuous storyline.

The first half is a straight 'Blast-everything-that-moves' as you fly up a seemingly never ending tunnel, beset on all sides by alien aircraft. These are colour coded and it'll take you no time to learn what does what and how it does it: yellow craft are indestructible and lethal on contact, green shoot down on you, blue fire up at you etc. Beware the ones that shunt you sideways into electrified walls where instant death awaits. It's pretty simple both graphically and visually reminding me vaguely of Imagine's now historical **Arcadia**. You get a bird's eye view of the tunnel with you flying up the screen and the aliens flying down. One word of warning: if you slow





to work out strategies.

Psi Chess will offer a challenging game to club and tournament level players too, and though it may take longer to make its moves, bound by the clock setting, it makes full use of it's preprogrammed knowledge of openings and strategies.

Of course, the game is only as good as its programmer, but Steven Watson is a keen chess player.

I thoroughly enjoyed Psi Chess. Once you've got the hang of which combinations of keys do what, you'll have no problems finding your way round the program. An excellent game ■

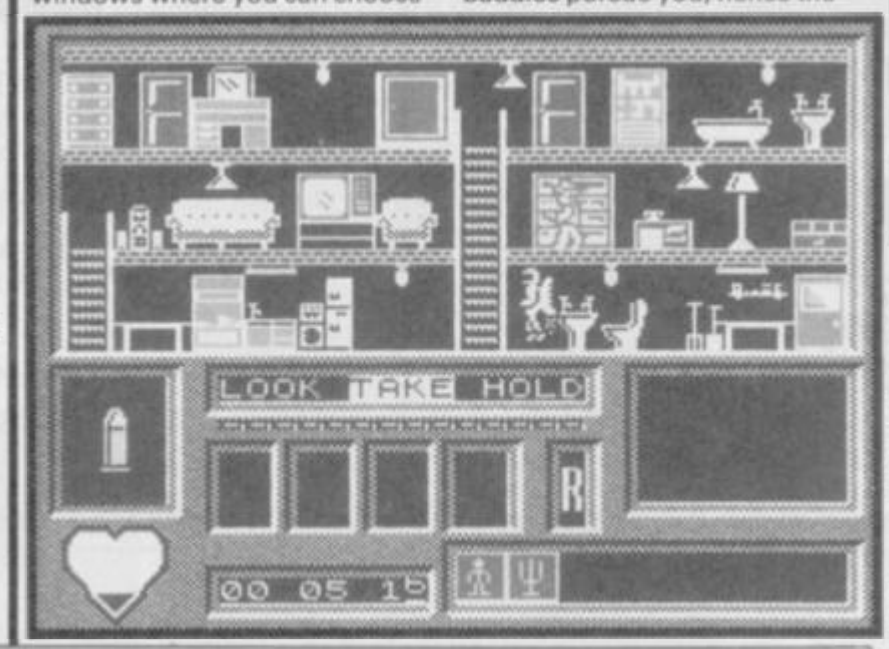
TIME TRAX

At first sight **Time Trax** looks like Activision's **Little Computer Person** with its cut away view of a house, loo, bed, even dustbins, all in place . . . and somewhere the owner is wandering about.

Actually, you lurk more than wander and it's not a house, it's the latest in bomb shelters (all three floors of it!) and the bomb's just dropped.

Time Trax, notwithstanding its incredibly detailed graphics turns out to be awfully tedious. The game is controled thrugh a number of icons and scrolling windows where you can choose whether to *Look, Take, Drop, Swap,* etc. It all takes time and as it's best to start off with a weapon and ammo, you spend the whole of the first screen searching every piece of furniture for them. Yet there are so many places to look it quickly becomes irritating and repetitive.

The storyline is seemingly complex but basically what you've got to do is defeat evil and balance the world's equilibrium by returning to the Eight Minds their Character Items — tiles. Various flickering baddies pursue you, hence the



◄ A bullet's found in the chest of drawers on the middle floor ● Beware the baddie on the lower level

weapons. If you've got no protection, they tend to drain your energy and in a remarkably short time you'll die of sheer exhaustion.

Having armed yourself, you set off to find tiles and, by trial and error, present the right tile to the right Mind. In between there are spells and potions to find and use, the Guardian of the Runes to dodge and time zones to explore. There are seven zones in all taking you from 50,000BC to 21,000AD, and the graphics in each are nicely different.

All the while you must use the scrolling windows to *Look* for handy objects and *Take* them. There are also charms which *Restore* energy, *Charm* a character when trading articles, *Open* some objects and *Banish* others.

A lengthy booklet is enclosed with detailed descriptions of how to play. But once I'd read it I didn't feel much the wiser. And you won't solve the game quickly. I'd need heaps of patience, much more, I suspect, than I'll ever have ■

ARCADE REVIEW

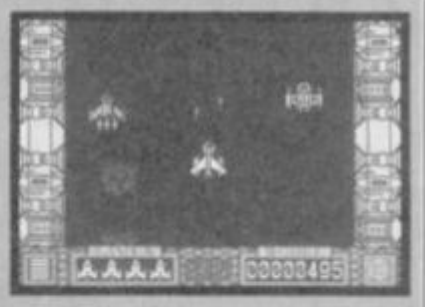
FACTS BOX

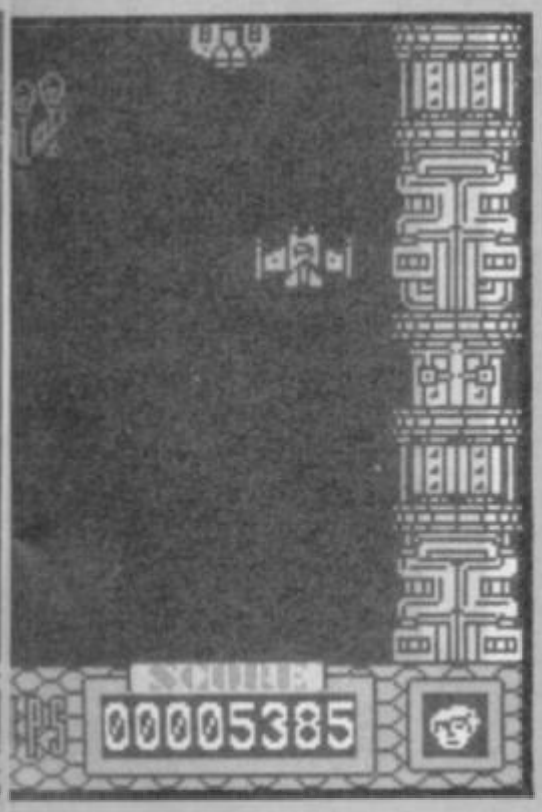
Well programmed, with a complex plot. The action tends to the predictable and repetitive though

Label: Mind Games
Author: Binary Design
Price: £9.95
Memory: 48K/128K
Joystick: Kempston, Sinclair, cursor
Reviewer:

Reviewer: Clare Edgeley

★★★☆☆





too much and hover at the bottom of the screen, yellow nasties tend to fly up from behind and zap you.

What saves the first part of the game is the difficulty factor. Some experienced zappers will, I'm sure, complete it almost immediately. But if you've got two left hands, like me, you'll find it a tricky job to get through all three tunnel sections unscathed.

Eventually I got there, and entered the space ship and the second half of the game. You've got to find four parts of a bomb and this time you control a sort of flying pig — described as a DEEN Mk II robot on the cassette inlay. It's even got a jet pack on its back and bounds around the maze avoiding robopods and hopping faces. The space ship is planned out in corridors with exits leading up and down. Very confusing as all the corridors look alike and it might be a good move to map this one out. The pig's got five lives and each ends when its energy, which drains away each time it comes into contact with a pod, falls to zero.

There's nothing spectacular about either of the two parts of the game. The graphics are very average and the gameplay is old hat. Embarassing to admit then that I rather enjoyed it and I didn't want to stop playing ■

FACTS BOX

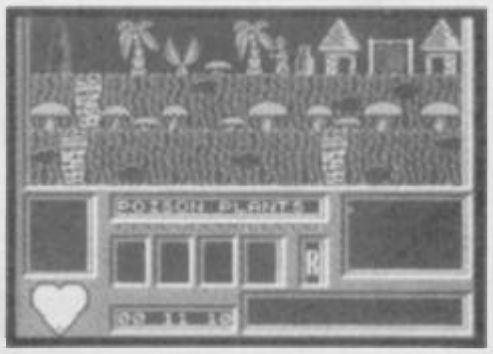
Two games in one. Incredibly unoriginal joystick-destroying stuff but quite addictive for all that

ICUPS
Label: Thor
Price: £8.95
Joystick: Kempston, cursor
Memory: 48K

Reviewer: Clare Edgeley

★★★☆☆

◄ Edgeley goes for broke ● The third and final section of the suicide tunnel ● Beware the green meanies they drop bombs on you



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COMPETITION

Whooooooosshhh!!

Faster Than Light is what happens when some of the most exciting and technically innovative adventure programmers in the country decide to down axes and runes and grab photon zappers and trubo lasers . . .

Taking a break from its mammoth adventures Gargoyle games has created a new label — Faster Than Light — to produce finger-twitching games in which to zap, zap and zap again.

Sinclair User is giving away copies of its first release, Lightforce and quality FTL sweatshirts.

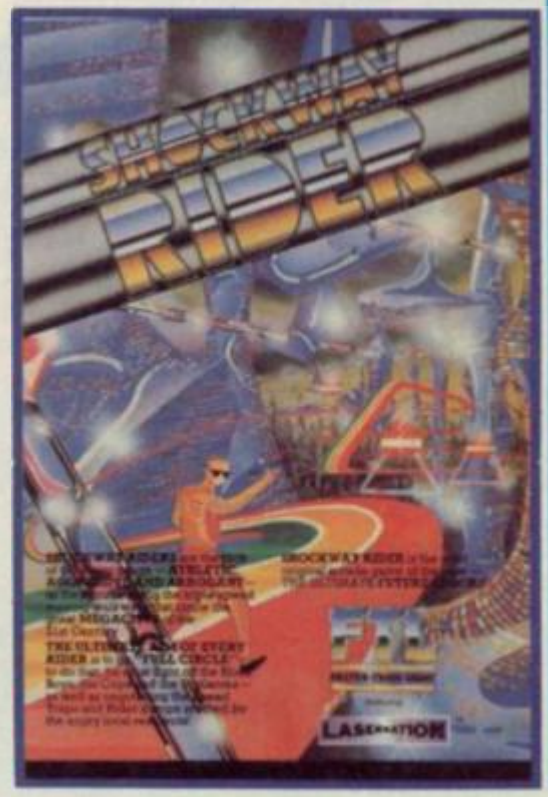
Lightforce is terrific. An ultra-smooth scrolling blast-to-bits blitzer with astounding graphics and seemingly no attribute problems at all. See it to believe it (meanwhile check out the screen shot below).

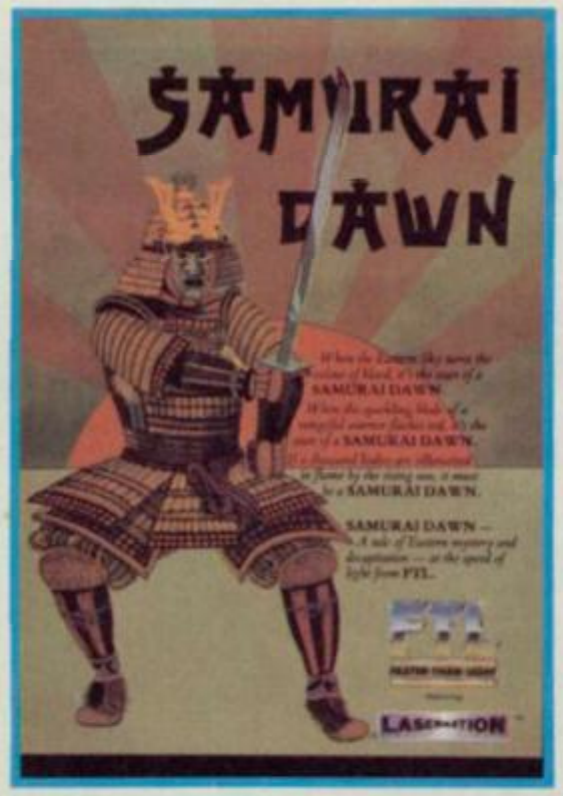
What you do

We have fifty copies of Lightforce and ten sweatshirts to give away the first ten correct answers get shirt and game. The next 40 just the game. Simply answer the questions below:

1) What was the name of the hero in Gargoyle's Tir Na Nog.
2) What was the title of Gargoyle's first release (be careful, it's tricky).
3) What was the title of Gargoyle's second adventure?

If you know the answers fill in the coupon below and send it to: Faster Than Light Competition, Sinclair User, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Closing date for the competition is September 24.





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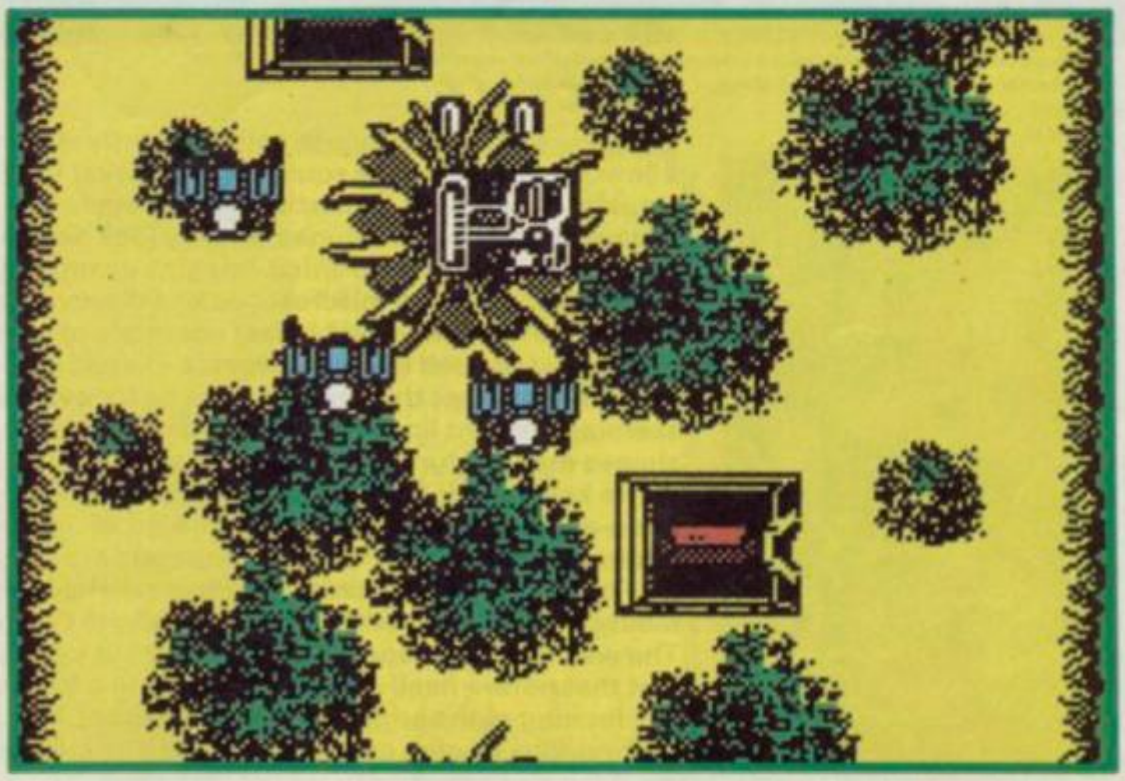
EMAP and FTL employees may not enter

A taste of what's on offer **Lightforce** below ▼



Molehills & mountains

Graham Taylor discovers the geometry of Fractals' firepower

At long last the three Lucasfilm, Fractal-based programes — **Raid on Fractalus, Koronis Rift** and **The Eidolon** — have been converted to the Spectrum. Each of the titles — to be released over the next couple of months — uses an intriguing new technique to create its graphics.

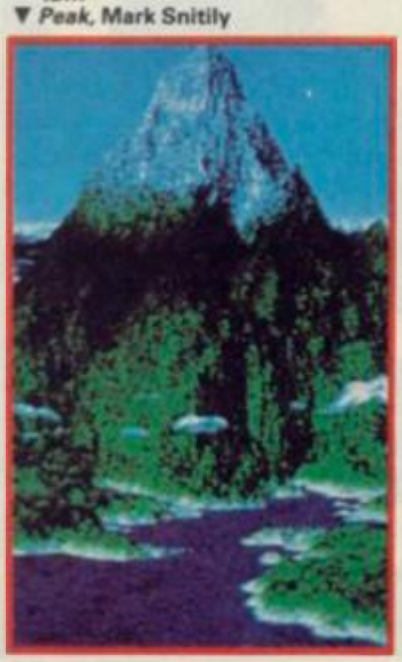
What are Fractals? They are the end result of what mathematicians call Fractal Geometry — a process where graphics shapes are built-up from miniature versions of themselves. Fractals are significant in a number of ways — mathematicians go ape over them — but one aspect is particularly relevant for their use in computer graphics. They produce incredibly realistic landscapes.

The Lucasfilm fractal games all feature large complicated landscapes with lots of details. The result is they look pretty good. But would you want to play them? In this special feature we look at the games and explain the system on which they are based.

Pictures: Creative Computer Graphics (Annabell Jankel, Rocky Morton/Cambridge University Press)

▲ *Fractal Lunar Mist*, Richard Voss, IBM

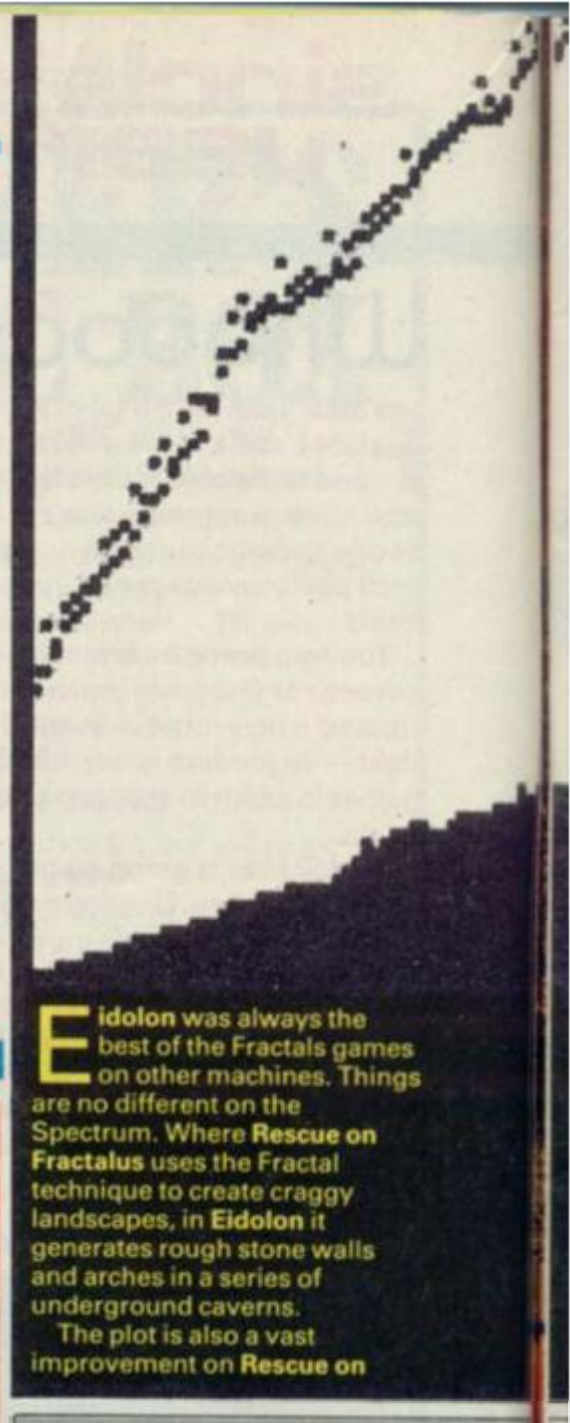
▼ *Peak*, Mark Snitily



FRACTALS

Imagine a square. Suppose you look really close at the lines that make up the square and discover they are not actually straight but consist of myriad regular square-shaped indentations that only look like a straight line because they are so small. Imagine examining the indentations under a miscroscope and discovering that each tiny indentation was in fact not made of straight lines but consisted itself of myriad square-shaped indentations. Now imagine that this process goes on for ever, each seeming straight line in fact consisting of tiny regular shapes made in turn of more tiny shapes . . .

The key thing is that this kind of wheels-within-wheels brain-addling process is exactly the kind of regular mathematical transformation computers are pretty good at. The results are, for example, very realistic-looking landscape graphics, with seemingly infinite craggy details. The way the landscape's graphics are built up reflects the fact that nature itself constructs things in a fractal-like way (try looking at the edge of a leaf, sometime). Hence the tremendous illusion of realism that can be created ■

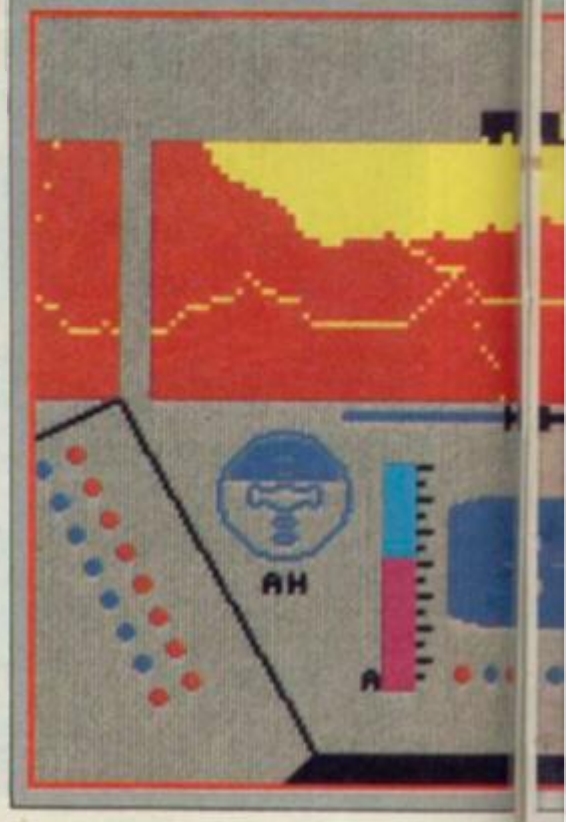


Eidolon was always the best of the Fractals games on other machines. Things are no different on the Spectrum. Where Rescue on Fractalus uses the Fractal technique to create craggy landscapes, in Eidolon it generates rough stone walls and arches in a series of underground caverns.

The plot is also a vast improvement on Rescue on

RESCU
FRACT

Rescue on Fractalus is the first of the Fractal-based titles. In many respects



GRAPHICS

By restricting the Spectrum colours in the fractal area to plain old black-and-white, and by some superb programming the caverns are beautifully realistic and animate smoothly as you weave your way through them. The Fractals create angular shapes that have a natural look about them, and the result is caverns that are genuinely claustrophobic.

The non Fractal graphics — the Eidolon cockpit interior and especially the monsters — are equally impressive, if a bit dated looking

FACTS BOX

Best of the Fractals games, beautifully converted to the Spectrum. Impressive original touches

THE EIDOLON

Label: Activision
Author: Tony Adams
Memory: 48/128K
Joystick: Various

Reviewer: Graham Taylor

★★★★★

THE EIDOLON

Fractalus. Eidolon isn't astoundingly complicated but has enough different features to keep you interested. More than that it has genuine style. The design of the graphics, the fractal landscapes, even the presentation of the instructions all mesh together to create the idea of a world of eccentric Victorian adventuring.

Someone in the **Eidolon** design team has obviously read H G Wells' *The Time Machine* because much of the character of the game is derived from that book. You follow the travels of Dr Josef Vincent Agon, a Victorian scientist whose diary tells of his strange adventures in 'The Eidolon', a device driven by the mystical powers of the mind. The mystical powers send you hurtling into a bizarre and terrifying world (don't they always) where around each next cavernous corner lurks an even more fearsome monster.

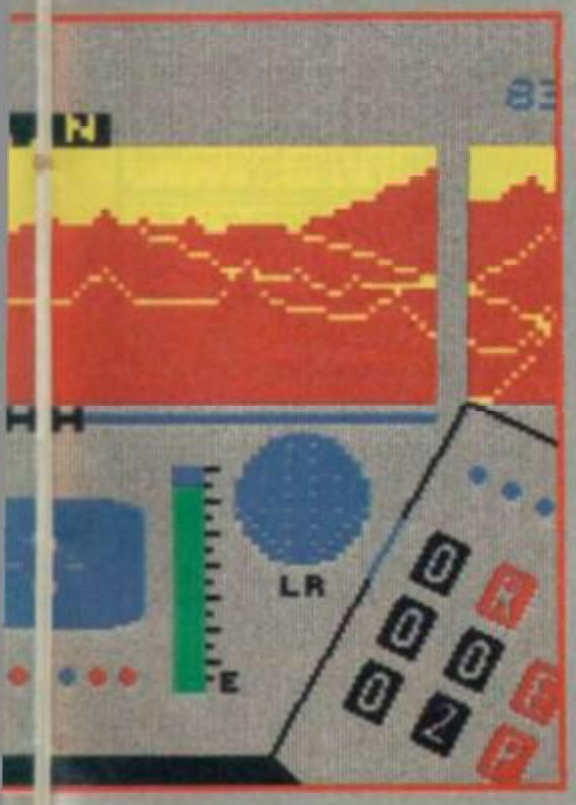
Put simply the game is this: guide the Eidolon around the mysterious caverns, collect the strange fireballs and discover what fireball kills what monster. Destroy all the combatants and you can take a crack at the dragon, head honcho in the monster department who guards the way into the next level. The assorted unpleasant beings you encounter can be destroyed by launching the correct coloured fireball, and the dragon barrier is removed by having collected the correct jewel.

Eidolon is part maze, part dodge and part reasoning game while at the same time being a Fractals demonstration.

The animation is limited but the excellence of design more than compensates ■

E ON ALUS

it's disappointing. Perhaps because it's the first it's the weakest on plot.



Fractals are all about craggy landscapes, consequently it's no surprise to discover that the game is set on 'Fractalus, the most inhospitable planet this side of the Kalamar system' — an excuse for lots of jagged edges if ever I heard one. The idea is that you pilot your Valkyrie fighter over Fractalus seeking out pilots shot down over the planet. You must then land and wait for the pilot to run on board. Rescuing pilots replenishes your energy — why I don't know — and after a certain point allows you to move on to the next level.

So the game splits into two sections, tracking down pilots (which becomes comparatively simple once you get used to the controls) and knocking out enemy gun emplacements before they blast you from the sky. In later levels there are space ships to deal with as well.

The problem is game play — there isn't enough of it.

Later levels make the pilots more difficult to find and have increasing numbers of alien machinery blasting away at you, but there isn't a lot of skill involved in many aspects of the game. In particular, it is surprisingly difficult to crash your fighter ■

GRAPHICS

There are two elements. The Fractal landscape seen through the ship's viewing screen and the interior of the Valkyrie fighter. The overall cockpit detail I found disappointing — all big and chunky. I thought it looked a little amaturish and out of keeping with the sophisticated graphic intentions behind the Fractalus concept.

The landscapes of Fractalus were better than the interiors but still not absolutely

convincing. The Fractal effect is used to depict an arid craggy landscape, sheer peaks dropping down to deep valleys and sudden outcrops of twisted rocks.

That's the intention anyway and at some points, particularly when moving at speed over a trench-like valley, you do get a visual effect that is quite spectacular. The problem is that the screen up-dating is too slow, making the whole thing look jerky. The Fractal effect itself is hardly the same on a Spectrum as it is on Crays and mainframes, but it certainly could be better than this (see Eidolon). Where you once had an almost infinite regression of mathematical shapes constructing extremely natural looking forms, here the Fractal effect tends just to look like wiggly lines.

FACTS BOX

Programming limitations and lack of game plot restrict the appeal of this, the first of the Fractal titles

RESCUE ON FRACTALAS

Label: Activision
Author: Dalali
Price: £7.95
Memory: 48/128K

Reviewer: Graham Taylor

★★★☆☆

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Teletext is the general term used to describe the CEEFAX and ORACLE services transmitted by the BBC and IBA respectively. There are no hidden charges for using teletext services and they are available all the time that there are ordinary broadcasts, from early morning till late at night. You have free access to several hundred pages of news, finance, fun, sport, features, in short an amazing wealth of information at your fingertips.

Until recently it was possible only to detect and decode these signals if you had a Teletext television but now it is possible using a Spectrum with the AGF Teletext/Telesoftware adaptor in conjunction with an ordinary TV and standard Video Recorder.

Channel 4 carries a special service for Spectrum users with an appropriate Teletext adaptor called Telesoftware. It can be downloaded to your Spectrum's memory just as if it came from tape

Also, using the Spectrum as a sophisticated page selector, it is possible to save screens for reloading at any time. This can be particularly useful for recipes or stock market figures because they are constantly updated. Similarly it is a simple matter to take a copy via a ZX or similar printer giving you as a Spectrum user considerable advantages over normal CEEFAX or ORACLE users.

PROTOCOL 4

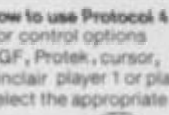
advanced game controller interface for the ZX Spectrum/Spectrum Plus

128 COMPATIBLE

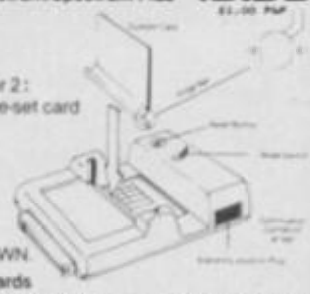
19.95 £1.00 P&P

How to use Protocol 4

For control options AGF, Protek, cursor, Sinclair player 1 or player 2: select the appropriate pre-set card



For Kempston: set the Mode Switch DOWN.



Programming Custom Cards

Programming a Custom Card will be necessary when the game you wish to control does not offer joystick options. Custom Cards can be reprogrammed as often as you like.

The interface is supplied with three pre-programmed and two blank cards.

CUSTOMCARD 5-PACK Only £2.66

CAN YOU PUT A STOP TO THIS LITTLE MENACE'S EXPLOITS?

JACK THE NIPPER...

AHH!.. WHAT A LUVERLY DAY.... FOR A WALK TO THE SHOPS...

...& HERE WE ARE!

OH NO! NOT HIM AGAIN

...OR SO THE STORY GOES - WE THINK!

AND SO... A STAR IS BORN...

I luv scaredycats

And I always have a smashing time

Me's a star

Just look what I can do!

Ha Ha! I'm a monster maker

Bet ya can't stop me freeing prisoners

Ugh teddies, they must think I'm a baby!

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MINDSTONE

ADVENTURE REVIEW

Mindstone is *Dungeons and Dragons* in disguise. It may be wrapped up in icons, animated screens and visual clues, but at heart it's a game of stamina, battling, spell casting and exploration.

As such it is neatly presented and highly entertaining though not, I think, so utterly techically staggering as previous Edge offerings.

Once again a crazed son kills his mother, breaks his father's spirit causing him to nearly go bald, and runs off with the most powerful substance in the kindgom. The crazy is Nemesar, the mother was Shalmera, the father is King Jorma, the substance is the Mindstone and the kingdom is the Shadowlands. The good guy is Prince Kyle, brother of Nemesar who assembles a team of close friends and comrades — Merel Quin and Taina — and sets off to find Nemesar and the Mindstone. Each member of the team has a different strength, for instance, Merel is strong and Taina has more psych power (used for spell casting).

Explore the Shadowlands, discover useful objects and spells, trade, defeat enemies, remove obstacles. Gradually you begin to discover what character is best suited to what purpose, you find ways of replenishing strength, psyche power and gold. As you search the Shadowlands you come across people with useful objects or advice to sell. You discover too, obstacles, of various kinds, blocking your way. Clearing a path may require the right spell, in the right person's possession, or perhaps brute force from the strongest member of your team.

◄ In the marshlands ● A traveller has something to sell ● But do you want it? ● The blue arrow points to Merel indicating which figure you are currently controlling

Actions cost — one way or another — casting spells uses psyche power, battling uses strength. Whilst some team members are more obviously suited to certain tasks than others, it is important to share the duties so that no one character gets completely dissipated. It's important too, to keep your eyes open. When a useful spell or object is present a symbol momentarily flashes on to the screen as you enter it.

There are two kinds of graphic display divided between the top and bottom of the screen. The top of the screen is rather like the kind of location illustration you might expect in a medium quality, graphically illustrated adventure. It gives some sense of atmosphere but wouldn't win any prizes.

The same may be said of the animation. In the top screen you see the four members of the team. If you tell one of them to, say, fight, he or she will walk over to the opponent and begin what appears to be a strange ritual dance, where both sides politely take turns in attacking. Attacking and trading are mostly animated and, quite honestly, I could live without it.

The bottom section of the screen is for issuing commands and keeping track of the status of each character. It displays the current character status, objects held and spells possessed. If you are using the joystick/icon control mode, it also displays the various command options. The graphic and icons are good, rather like **Shadowfire**, although some of the objects need to be described using the *Examine* option. (which uses words) to tell what they represent.

I enjoyed **Mindstone** very much. Many attempts have been made to integrate *D+D* style strategy with adventure puzzles and graphics. **Mindstone** is one of the most entertaining, if not the most technically ambitious ■

FACTS BOX

Thoroughly entertaining strategy game with adventure elements. The animated graphics is icing

★★★★★

MINDSTONE
Label: The Edge
Author: John Pitcher
Price: £8.95
Joystick: various
Memory: 48/128K
Reviewer: Graham Taylor

▲ The four members of your team ● Prince Kyle, Merel, Quin and Taina ● Each of them have their own strengths and weaknesses

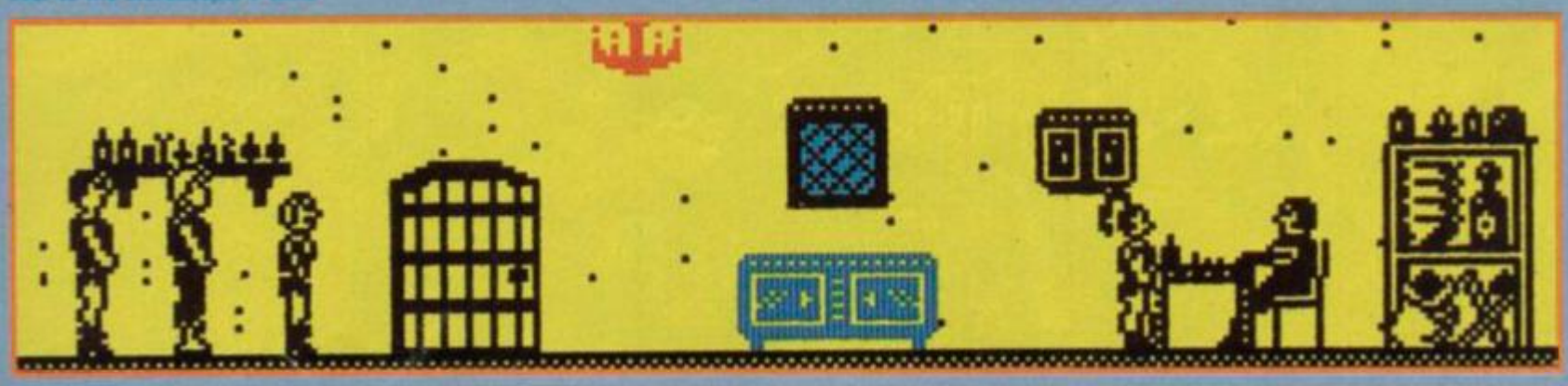
Interior of the mystic's store ● Here you'll find the Zap Spell ● Taina walks over to the storekeeper's table ▼

PLAYING HINTS

- **When used correctly a psyche ring can restore psyche energies. Think about it**
- **To dig you may find a spade useful**
- **Ice melts**
- **Boulders can be moved**
- **To get gold, base metal should be combined with alchemy**
- **Use *Examine* to discover what an object is before you pick it up**
- **There are clues as to who should have what object on the cassette cover**
- **Think about the best way to fight an enemy — there are a number of alternatives, some of which will be less energy consuming than others**

COMMAND MODES

An important element of the game. I was getting thoroughly fed up to begin with, using the menus and joystick to repeatedly issue the same commands — it became a very tedious, if simple, process. I started to enjoy the game when I discovered the direct keyboard entry mode which works moe like **Lords of Midnight**; one key stands for each instruction, characters are selected by pressing numbers one to four. It speeds the game up considerably



BACKGROUND NOISE

Backgrond Noise looks behind the top games of the moment and speaks to the programmers who sweated blood to produce them. Background Noise looks from the author's point of view — at the particular programming problems and the way they were solved.

PYRACURSE

by Mark Goodall

"The game was an idea of Andrew Hewson's. All we kicked off with really was that we wanted a game with four characters and that the working title was to be Sphinx. That was around February last year.

Certain ideas began to crystalise. We wanted to set it in the classic adventuring period between the wars — like *Raiders of the Lost Arc* — nothing specific just a certain style and general feeling we wanted to create. We moved the setting to South America from Egypt because it seemed more mysterious and we could tie in a sort of Von Danekin mysterious alien visitors idea.

I got a lot of ideas — specific designs even — for how the game would look from an old catalogue I had from an exhibition of Inca treasure that had been held at the Royal Acedemy.

The real technical problem was speed of processing. The window formed by the TV screen scrolls over a large world in three dimensions. The world is occupied by numerous interactive objects and animated sprites which have to conform to the normal visual rules about what is visable when something passes behind or in front of another object.

Graphic images were separated into two distinct groups. Those which remain in the same relative place, like walls and with which it is not possible to react, and objects like doors, keys and chests the status of which may change, eg, doors open, keys are picked up.

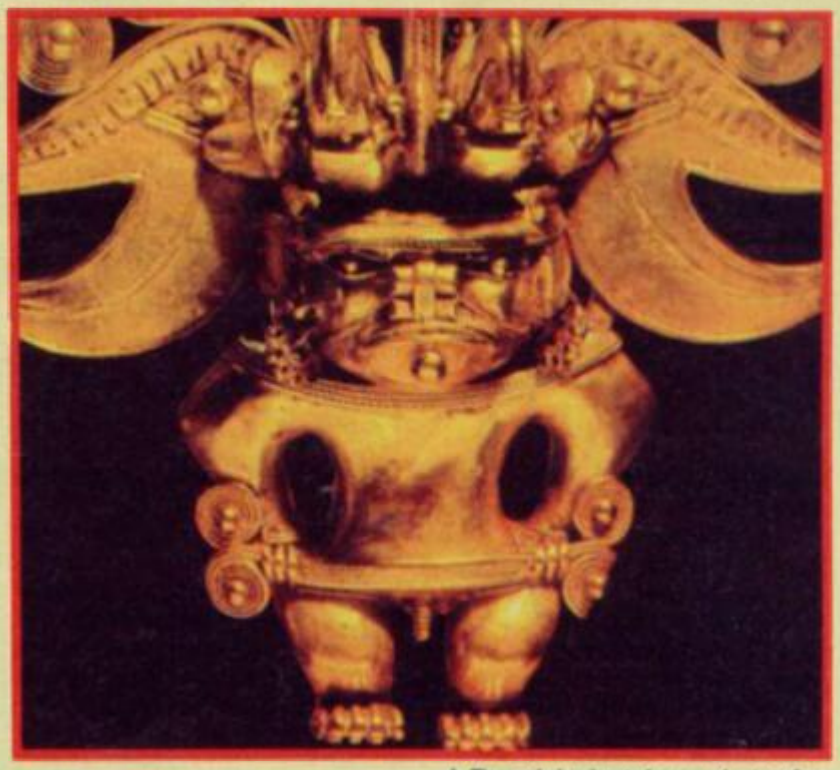
Getting the graphics shapes right was obviously one thing — some characters took nearly a week to get right because of the need to produce four editions, one for each direction, but the animation was the real problem. I spent a good few days crawling around the carpet on all fours trying to work out how a dog walks!

The screen image is initially built up in a 3K buffer which is the size of the active screen. This screen buffer is arranged in uninterrupted screen character columns so that plotting down the screen is made very easy and hence extremely fast.

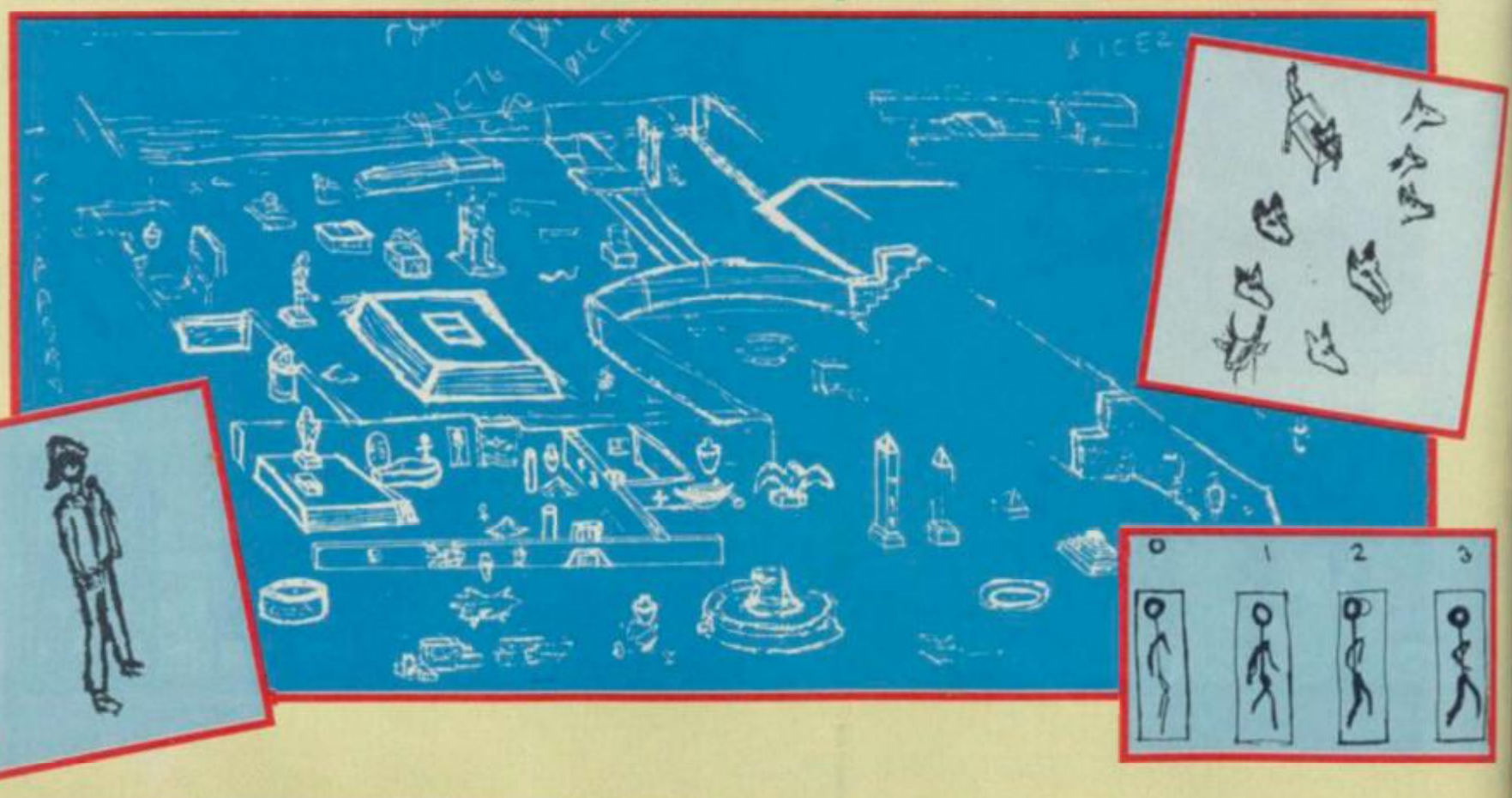
The data for the game world is on three levels each of which is approximately one hundred screens in size. The levels of the game are sub-divided into eight background units called zones. These elements are sixty-four by sixty-four screen characters in size and each has an associated list of background features.

The scrolling is in nibbles (a half character) both horizontally and vertically. This was achieved by moving the window horizontally in characters followed by a nibble scroll of the screen buffer when required. On each cycle a whole new screen image has to be redrawn simply because any object could have moved. Speed was achieved by only up-dating information in zones currently in the screen window.

The actual plot of the game developed with the hard programming. We actually wrote a lengthy story featuring the characters which 'explained' how they came to be on the Pyracurse quest. It also developed the individual characters and their motives. I actually did some work on coding 'personalities' for the characters in the game, but in the end this aspect of the program was dropped — making it into something genuinely significant would have taken up too much time."



▲ The original catalogue photo of an Inca figure which became an important motif in the game



Part of Mark's design work on the overall Pyracurse layout ● The relative positions of major features were decided in the early stages when these sketches were drawn ▼

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The Hero Returns!

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Purnell Book Centre, Paulton, Bristol BS18 5LQ

Making sense out of modems and micros

The system talks back! In a nutshell that's what grabs people about interactive micro communications. Buy a modem and before you know it you've been bitten by the comms bug.

Yet, what advantage is there in being able to talk with other people over the telephone lines by writing on-screen, when you could use a phone in the normal way much more easily and actually talk to them?

Public access databases, such as Prestel, accumulate thousands of pages of information daily and dump it on to their systems, but who needs to read the news minutes ahead of radio and two hours before it's on the TV?

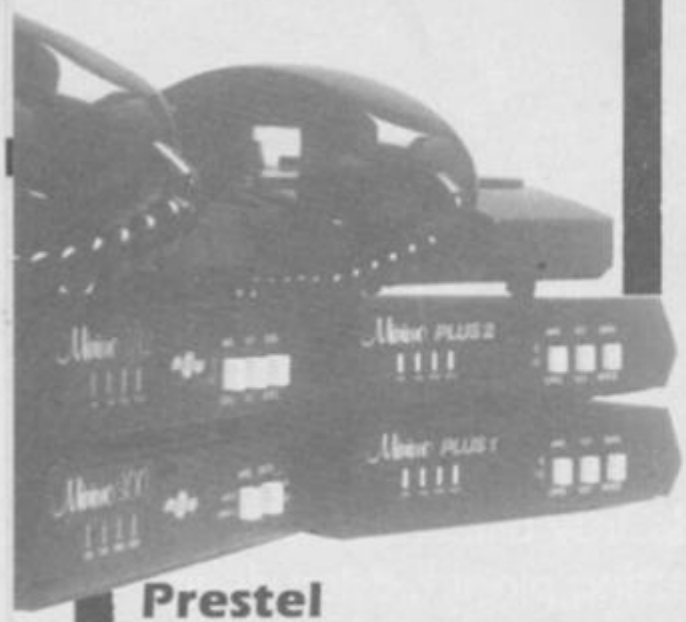
Sure, specialist interactive databases clearly have an important function as an intelligent interactive source of data on, say, share prices or case law. But what use is communications in the home?

If you look at it like that, the answer is very little. But, by the same token, what use are computer games, or what is the point of learning to program?

Communications, just like any other aspect of home computing, is interesting largely for its own sake.

If you are thinking of getting a modem then don't kid yourself. You'll end up talking to a comms cowboy at the other end of the country, paging through latest computer product information, or jousting with wizards in **Shades.** You won't be doing anything particularly important apart from having fun!

JOHN GILBERT



Prestel

The bulk of information on Prestel concerns television timings, film reviews and the prices of food in the shops. It will also allow you to order goods, from shops such as Harrods, knock up a bill on the database which is transmitted to the store which then delivers to your door.

Prestel Teleshopping encourages you to stay at home and spend money, although the order you make is unlikely to be delivered for a few days. So much for instant access.

Baud rate: 1200/75
Cost: £26 a year plus 6p an hour
Info: London Prestel Centre, Freepost, London SU9 7BR

Micronet 800

Over the last four years Micronet has built up several hundred thousand pages of information which can be accessed through a simple series of menus. It's mainly an information base — just press four keys and you have the latest computer news — but, much more interesting to micro-owners, is the high degree of user interaction.

Two interactive multi-user games, which can handle more than 50 players each simultaneously, are already on the system.

Star Net is the elder of the games, with a science fiction theme. Players battle to amass gold, build fleets of ships and, ultimately, become Emperor of the Galaxy. Players enter their moves via modem which are put into force when the game is up-dated every two days. You pay to play — move by move.

Shades, the second game, came on line this month and is truly interactive. Imagine a multi-player version of **The Hobbit** with text-line but no graphics. The other characters in this high fantasy — wizards and monsters — are either other players or computer-generated intelligent 'mobiles'. Unlike **Star Net**, you don't pay for each move, but the 'phone charges run up a bill of 99p an hour.

The Micronet chat lines and mailbox facilities prove seductive for those who want a cheap way of communicating with friends or colleagues. Each Mailbox has a number which operates in a similar way as a house number to a postman.

Baud rate: 1200/75
Cost: £66 a year including free modem
Info: 01-278 3143

MUD

MUD — Multi-User Dungeon — is a true play-by-modem adventure operated by BT.

MUD — the first game of its type is smaller than Micronet's **Shades** and can handle fewer players at one time. The cult fantasy game is based on a points system: the more you get the higher you rise in the MUD world. You start life as a Novice with a paltry number of points and, if you're unfortunate, low health, strength and money. It's up to you to barter, beg or steal in order to clamber up.

The game has a limited vocabulary but you will soon find that you are taking a part in a fantasy world which becomes more realistic when you realise that the MUD world will change because of something you have done.

Baud rate: 1200/75, 300/300, PSS
Cost: £4.95 to join, then around £1 per hour to play
Info: 01-608 1171

Bulletin boards

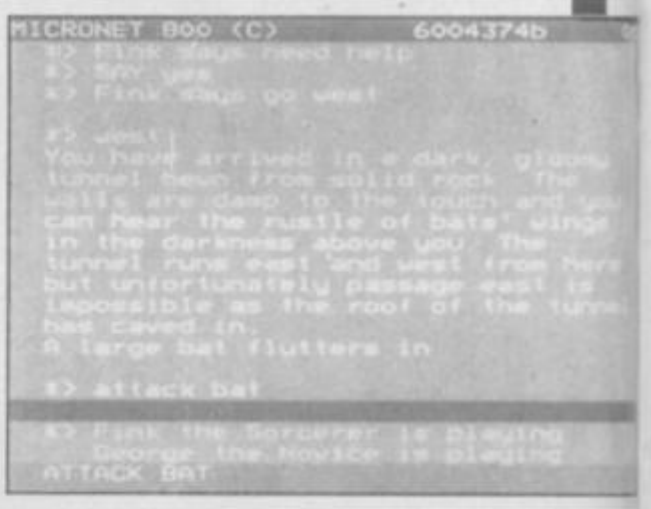
Bulletin boards are simply a kind of electronic scratch pad on which anyone can phone and leave a message. They are cheap to run and, usually, no fee is required for you to log on to one. Before you try to make contact with a bulletin board, however, you should make sure that your modem is compatible with the signals the board is putting out, and that it will accept requests from your type of computer.

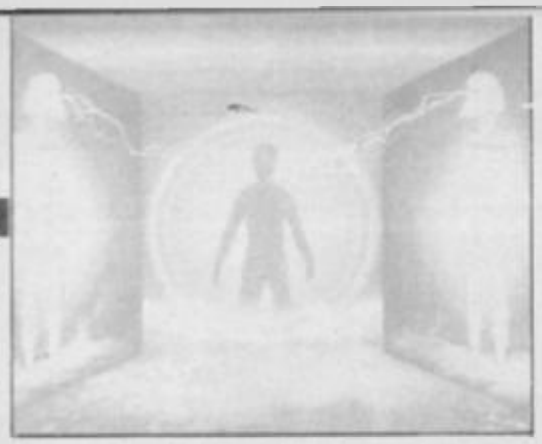
The information on bulletin boards around Britain, of which there are several hundred, is diverse but the main core of a service is a message board on which casual callers can scrawl for each other. Some also include a telesoftware facility supported by callers who can either up-load — donate — or down-load programs.

Other bulletin board features include technical information on popular micros, product lists — which you may up-date — lonely hearts, and news.

Baud rate: Mostly 300/300
Cost: Mainly free
Info: See Table

▼ Shades from Micronet


MICRONET 800 (C)
60043745
You have arrived in a dark, gloomy
tunnel cut from solid rock. The
walls are damp to the touch and you
can hear the rustle of bats' wings
in the darkness above you. The
tunnel runs east and west from here
but unfortunately passage east is
impossible as the roof of the tunnel
has caved in.
A large bat flutters in
=> attack bat
=> Fink the Sorcerer is bleeding
George the Novice is bleeding
ATTACK BAT



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>
NARROW ROAD BETWEEN LANDS.
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FOOTHILLS.
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CAVE.
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RAPIDS.
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YOU ARE WAYLAID IN A TREACHEROUS SWAMP.
*
DR T
SCEPTRE DROPPED.
(PERSONA SAVED ON 9,247)
VASE DROPPED.
(PERSONA SAVED ON 9,296)
NECKLACE DROPPED.
(PERSONA SAVED ON 9,446)
*
N
RAPIDS.
*
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▲ A slice of the action from MUD

Librarys

Most bulletin boards are simple affairs which have the user at one end and a modem with backing storage at the other. Some libraries, medical organisations and magazines also have bulletin boards which carry classifications of books, and reader services information.

For instance, the Blaise database is run by The British Library and includes book catalogues. Alternatively, if you have the money to spare on 'phone bills, you might try the Bibliographic Retrieval Service in the United States.

Getting started

So what do you need to kick off? Really just a modem and a Spectrum.

A modem is simply a piece of hardware to encode data from your micro and send it down a phone line to be received and decoded by a modem and micro, or main-frame at the other end. It also performs the reverse function, unscrambling data from the phone lines and translating it so your micro can read it.

Modem prices have come down dramatically in the last year and you can now pick one up for under £50. It is best to get one with switchable baud rates. Different bulletin boards and database networks 'broadcast' at different data transmission and receiving (baud) speeds. You need to be transmitting and receiving on the right speeds before you can hook up. Any modem you buy should be able to handle both 1200/75 and 300/300 baud.

You'll also need software for the Spectrum to write to viewdata (Prestel/Micronet) and bulletin systems. This is included free with most modems (usually on Rom) but check before you buy.

Sinclair User is also offering in this issue an exclusive special offer worth over £155 of a VTX500 modem plus comms software, £40 telesoftware vouchers and a year's membership of the Micronet database as a starter pack — all for less than half price — £66.

Some of the other modems on offer include

- ***QMOD. For the Spectrum Plus and 128. 1200/75 and 1200/1200 bauds. Prestel and Bulletin board software is included on Rom. Telesoftware, terminal emulation and protocol adjustment facilities are available. Price: £94.00. Information: Spectre Communications, The Old School House, Tenter Row, Gosby, Ravensworth, Penrith, Cumbria CA J10 3JA.***
- ***WS1000/2000/3000/4000. The WS range of modems for Plus and 128. Basic modems. Include 300, 1200/75, 75/1200 with full duplex, 600 and 1200 half-duplex bands. Bell standard software included for communications in the United States. Base price: £149.00. Information: Miracle Technology, St Peter Street, Ipswich IP1 1XB.***
- ***The Modem. 1200/75, 1200/1200 baud. Viewdata compatible. Auto-dial. Price: £49.00. Information: Miracle Systems, Avondale Workshops, Woodland, Way, Kingswood, Bristol BS15 1QL.***
- ***VTX and Voyager. VTX modems 1000 and 5000 used for Micronet communication. Recently released comms software package, called VTX711. Baud rates are 300/300, 1200/75, 75/1200 and 1200/1200. Package recommended for Voyager7 modem. Base price: £49.00. VTX711 price: £47.00.***

The US databases

If you exhaust the bulletin board possibilities in Britain you can go abroad to the United States — expensive, but great fun.

The Source, owned by Readers Digest is one of the biggest information databases in the United States, but you will need to register to become one of its 80,000 members. It operates in a similar way to Micronet with mailbox facilities, teleshopping and computer interests, but it also combines Prestel features such as the latest news, sport and travel. It is also, in some ways, easier to use than Micronet. Instead of typing a four digit number from a menu to find the latest film reviews you just type *Movies* or *Focus*. You can reach The Source from Britain by using the Packet Switching System (PSS) of information transfer which transmits one package of information at a time down the telephone line, that prevents it from being corrupted by static. The cost of PSS is cheaper than making a 'phone call so, if you're interested in exploring databases and bulletin boards world wide, you should contact the Packet Switch Stream Customer Service Group at G07 Lutyens House, 1-6 Finsbury Circus, London EC2M 7LY.

Compuserve is another huge US database offering material similar to the Prestel network ■

Hooking up

Logging on to any database or bulletin board is actually extremely easy.

- ***Set up your modem and computer. The modem is plugged into the telephone socket and the telephone lead is inserted in the back of the modem. Connect the modem to your micro. If your comms software is on Rom it's available automatically but you will have to load in any comms package you've bought***
- ***Check the baud rate of the board or database you intend to contact and set your modem accordingly***
- ***Switch on your modem and ready the software. Your modem may have an auto-log on system in which case you will be asked your identity number for the specific system you are to contact. For instance, Micronet needs a ten digit identity***
- ***'Phone the board or database. The contact computer replies with a squeak. You should then press down the 'Line' switch on your modem***
- ***A welcome screen should then appear and if it's a commercial network you will be asked to enter your password***
- ***You will then be through to the board or network's main menu from which you can then select any area of the database.***

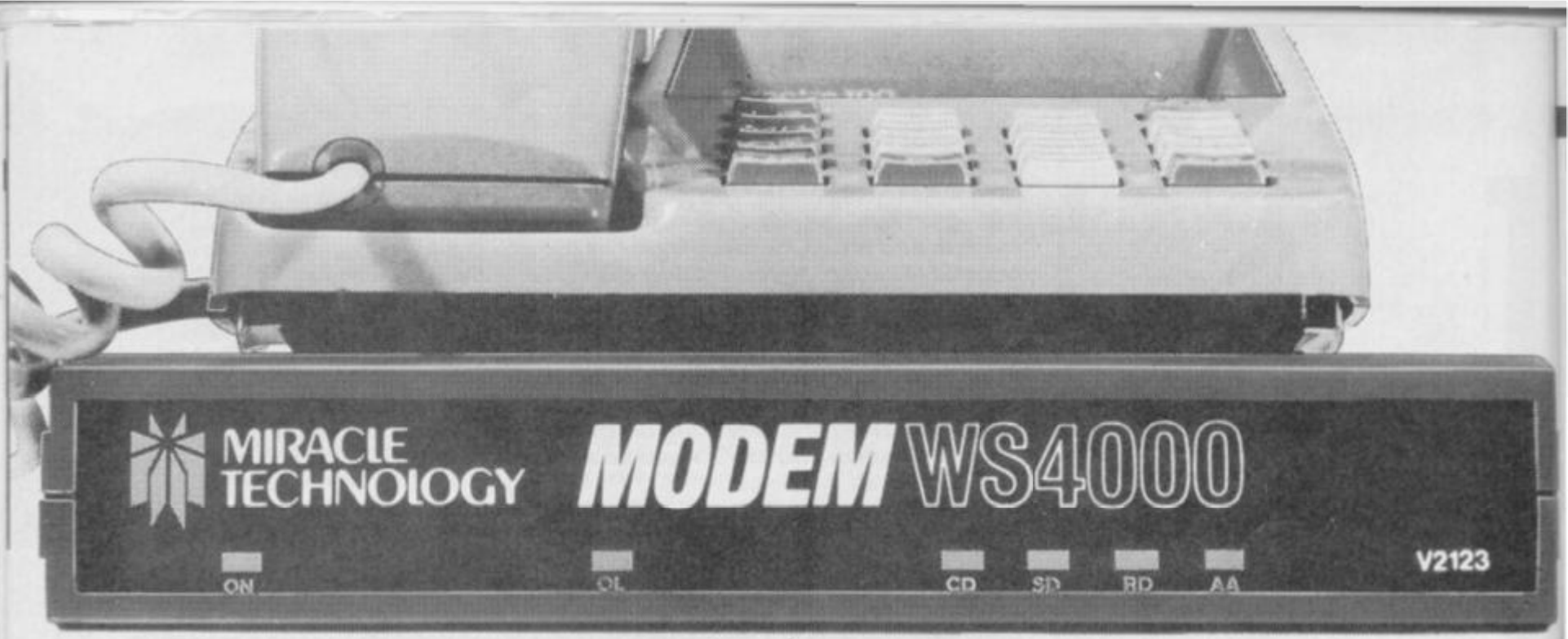

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Table of UK bulletin boards: Baud rate 1200/75

Name	Number	Hours	Area
Itec	0268 22177	24	Basildon
Itec	01 735 6151	Workdays 2-5pm	Brixton
Itec	0224 641585	24	Aberdeen
Itec	0222 464725	24	Cardiff
Itec	0244 821231	24	Deeside
Itec	0782 265078	24	Stoke
Itec	0382 25820	24	Dundee
Itec	0938 528561	24	Isle of Wight
Itec	0724 588403	24	Scunthorpe
Itec	0952 677485	24	Telford
Itec	0273 609554	Workdays 2-5pm	Brighton
Itec	0425 63415	Mon-Thurs 2-5pm Sat/Sun	Gloucester
Itec	0274 725895	24	Bradford
Itec	0424 445776	Mon/Wed/Fri 2-5pm	Hastings
Itec	0632 445772	24	Hebburn
WITec	0942 677485	Workdays 2-5pm	
ITCU Exchge and Mrt	01 960 4742	24	London
Communitel Itec News	01 960 0327	24	London
Communitel Itec News	01 958 7098	24	London
CABB	01 631 3076	24	London
RSGB	0707 57477	24	London
CBBS	0392 53116	24	Exeter
Inter Co	01 253 8788	24	London
OBBS	0524 426132	24	Morecombe
Microgmome	01 888 8894	24	London
Metrotel	01 941 4285	24	London
Technomat	01 450 9764	24	London
Microtest	0208 77677	24	London
NBBS	0277 228867	24	Essex
NBBS	01 648 0018	Workdays 9pm-8am	London
NBBS	0692 630186	24	Horning
NOBBS	0295 72082	24	—
FBBS	01 346 7150	10am-10pm	London
SBBS	0923 67644	10pm-8am	—
NBBS	01 648 0018	Workdays 10pm-8am	London
NBBS	0628 46691	24	Marlow
NBBS	0224 641066	Workdays 10pm-5am	Aberdeen
NBBS	01 669 7249	Workdays 10pm-6am	Wallington
CABBS	0892 662698	24	—
BB	01 455 6607	24	London
Belton	0493 781334	24	—
BMOC	0612 734066	24	—
MOBBS	061 736 8449	24	Manchester
Oxford	0865 67788	24	Oxford
Martel	01 346 7150	24	London
Estelle	0279 441188	24	Harlow
NI-MEP	0265 52346	Workdays 10am-5pm	—
Distel	01 679 6183	24	London
Netflash	01 941 4285	24	London
Communitel demonstration	01 968 7402	24	London
Healthdata	01 986 4360	24	London
Open University	0908 643298	—	London
Owltel	01 927 5820	—	London
Swafax	0622 580440	24	—
NBBS	0936 77025	—	Cheshire
CBBS	069 92314	24	Cumbria
Acorn	0223 2343642	24	Cambridge
Local Info Hackney	01 985 3322	24	London
C-View	0702 546373	24	Rochford

Table of UK bulletin boards: Baud rate 300/300

Name	Number	Hours	Avon
CBBS	0392 53116	24	Exeter
Estelle	0279 443511	24	Harlow
Oxford	0865 67788	24	Oxford
Martel	01 346 7150	24	London
NBBS	01 883 5290	Workdays 10pm-8am	London
Basug	0742 66798	—	—
Babbs	0225 23276	10pm-11.59pm	—
Babbs II	0394 276303	24	Felixstowe
Babbs III	0268 778956	24	Basildon
Abbs	0225 23276	10pm-9am	Bath
BBS	0207 543555	24	Tyne and Wear
Beeboard	01 624 7460	—	London
Bloxham	0295 720812	6pm-8pm	—
CBBS	0486 25174	24	Surrey
CBBS	0707 328723	9pm-8am	Chiltern
CBBS	01 399 3136	Sunday 5pm-10pm	London
Central	01 075 36141	—	London
BBS	0243 511077	24	Chichester
TBBS/CNOL	0524 60399	12am-10pm	Lancaster
CBBS	069 92314	24	Cumbria
Forum 80	0482 859169	Tues Thurs 7-10pm Sat Sun 1-10pm	Hull
Forum 80	01 902 2546	Office hours eves weekends	Wembley
HamNet	0482 407150	6pm-8am	Hull
BBS-1	01 640 2617	Thurs Sun 10am-10pm	London
BBS-2	01 346 7150	Workdays 8pm-9pm	London
Mailbox	80 051 428 8924	24	Liverpool
Mailbox	83 0384 63 5336	Mon-Sat 5.30pm-8.30am Sun all day	West Midlands
MGNet	01 339 2136	Sun only 5pm-10pm	London
Microlive	01 579 2288	24	London
Microweb	061 579 2288	24	Manchester
NBBS	0692 63010	10PM-12.30AM	Norfolk
NKABBS	0795 842324	9.30pm-12.00am	Kent
NBBBS	0827 288810	24	Birmingham
OBBS	061 427 1596	9am-7pm	Manchester
Pip	0742 667983	24	Sheffield
SAABS	0698 884804	24	Lanarkshire
BB	0243 511077	24	Portsmouth
TBBS-city	01 606 4194	24	London
TBBS	061 736 8449	24	Manchester
TBBS	0703 437200	Workdays 5pm-8am	Southampton
MOBB	061 736 8449	24	Manchester
WABBS	0903 42013	24	Worthing
CABB	01 631 3076	24	London
Distel	01 679 6183	24	London
NBBS	0692 630186	24	Horning
NBBS	0224 641066	24	Aberdeen
BB	01 445 6607	24	London
OBBS	0524 426132	24	Morcambe
NBBS	0936 77025	24	Cheshire
RCPM	0782 265078	24	Stoke
Fido Fore	01 310 4110	24	London
NBBSL	01 883 5290	11pm-8am	London
Mitcham	01 648 0018	24	London
NBBS	0277 28867	24	Essex
Futureman	0908 614469	—	—
Amrad	021 744 1558	24	Solihull
Ballingary	0592 860313	9pm-8am	Ballingary
BB	0473 781334	9pm-7am	Ipswitch
LABBS	01 373 6337	24	London
NBBS	0455 54798	24	Lutterworth
Maplin	0702 552491	24	Essex

Table of Information Bases (telephone numbers not linked to database)

Datasolve (including World Reporter) (09327) 85566
Dialog/Information Index (0865) 730969
Pergamon Infoline (01) 377 4560

The British Library, Blaise, Bibliographic Services Division, 2 Sheraton Street, London, W1V 4BH. 01-636 1544

Scicon Computer Services Ltd, Brick Close, Kiln Farm, Milton Keynes, Buckinghamshire, MK11 3EJ Tel: (0908) 565656

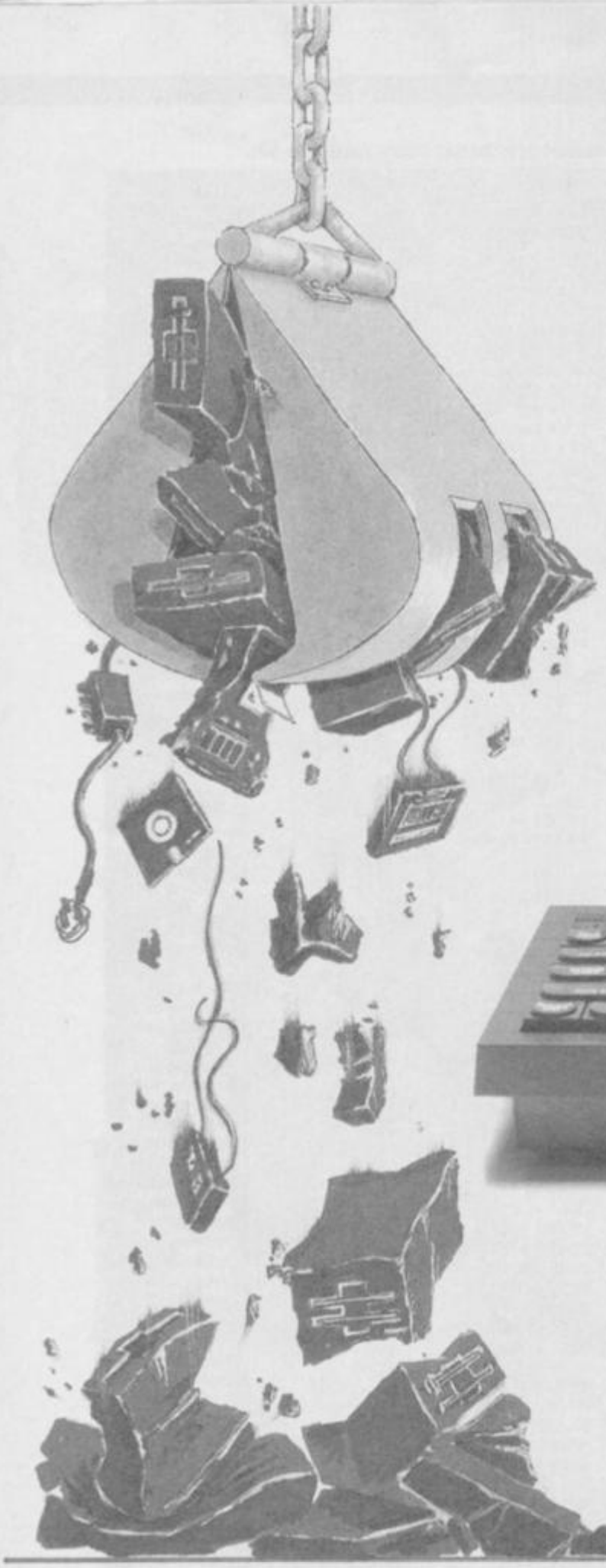
Table of US information bases

The Source, Source Telecomputing Corporation, 1616 Anderson Road, Mclean, Virginia, 22102 USA (0101) 703 734 7500
* Similar to Micronet 800

Compuserve Inc, 5000 Arlington Centre Boulevard, Columbus, Ohio, 43220, USA (0101) 614 457 8600
* Similar to Prestel

Bibliographic Retrieval Service, 1200 Route 7, Latham, NY 12110, USA (0101) 518 783 1161

NewsNet Inc, Customer Service, 945 Haverford Road, Bryn Mawr, PA 19010, USA (0101) 215 527 8030
Dow Jones News/Retrieval Service (0101) 609 452 1511



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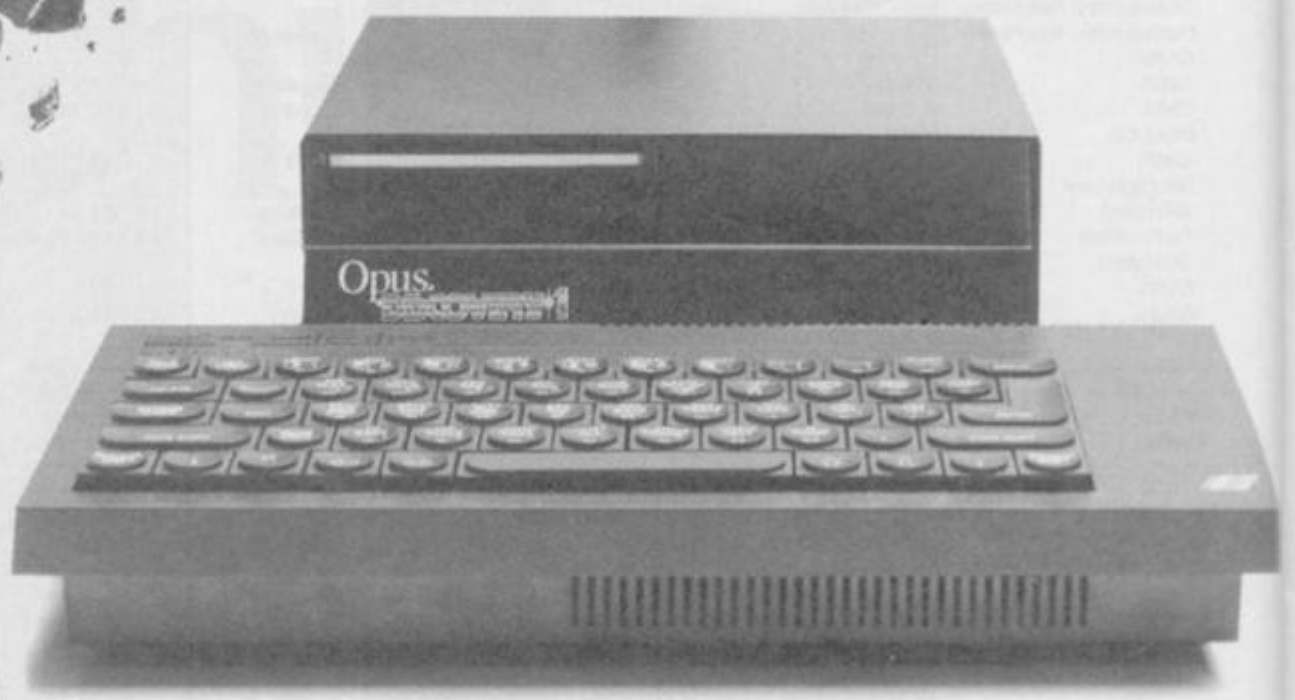

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Opus.

All the jargon

All areas of computing are plagued with specialist terms and communications people are more guilty of creating techno-speak than many others. If you want to understand the comms jargon the buzzwords below should see you through ■

ASCII American Standard Code for Information Interchange. One way in which data can be represented. (See also Baud, Bit and Format)

Auto-answer Your modem will automatically announce itself — with a message — if someone 'phones it up

Auto-dial A hardware/software device which will dial a number within a specific range and make a note of it if the answer is a computer tone. Useful for 'hackers'

Baud-rate The speed at which information is sent measured in bits per second. Matching the baud rates of sending and receiving equipment is essential for any communication. Common standards for send/receive are 1200/75 or 300/3000 baud.

Bit The smallest unit of information sent, usually represented as 0 or 1. Different patterns of bits convey different messages — in a similar way to morse code. For instance, 10000001 represents the letter A while 1011010 means Z in the ASCII code standard

Buffer A storage area for holding data which has left one part of a machine but for which the next part is not ready. For instance, the computer may put data into a buffer while it waits for a signal to transfer information down the telephone line

Bus A channel down which data travels

Channel Path for communication between one device and another

Encryption A coding process which makes data secure from hackers or thieves

Format Layout of data so that it can be understood by another device

Frame Describes a page display on a system such as Prestel or Micronet 800

Gateway A hardware device which connects one database with another

MBX Mailbox. A system for sending and receiving messages down the telephone line. Messages are collated on a central database and only the MBX owner can read ones they have received by entering his or her mailbox code number

Network A series of devices connected together and able to talk to each other such as two Spectrums communicating via modem

Packet A long message which can be chopped up into smaller data blocks by Packet Swtiching ready for sending down a telephone line

Protocol software Software which ensures the screen formats and data reading methods of sender and receiver are the same

PSS Packet Switching System to break up long messages into smaller data packets before they are sent. When they get to their destination the message is reassembled. The system keeps the clarity of long messages which could be garbled by noise on the telephone line

PSTN Public Switch Telephone Network. The normal telephone system operated in the UK

Station Any computer hooked up to any network or board so that a user can access its facilities

Viewdata A system of transmitting information and reassembling it in graphic display form. Prestel is the 'standard' UK viewdata format

Window A specific time in which a user may contact a database or other station on a network. People using satellites must wait for a window before the satellite is in a position to transmit to them or receive from them. Many private bulletin boards only operate for a few hours a week.

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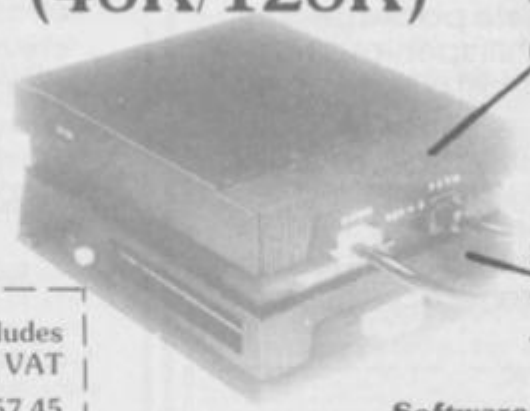

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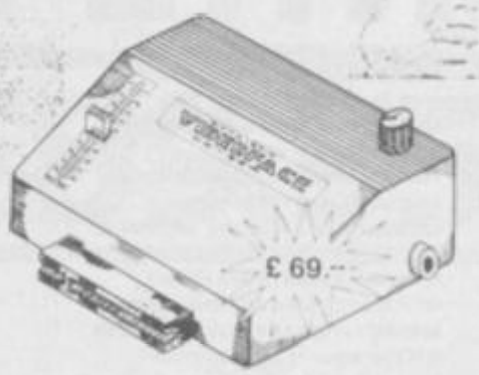

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ELITE

STRATEGY SIMULATION

REVIEW

At last, 128 owners can take a Cobra Mk III for a spin in Firebird's new version of its classic **Elite** trading and combat strategy game.

The new version uses the same plot and trading missions as before but the graphics and action have been improved. You start the game docked at the space station in the Lave system. Short-range scanners tell you where your fuel can take you and a trading list gives information on the prices of goods you can acquire on the planet of your choice.

You are a trader, of course, and the aim of the game is still to buy from one planet and sell at a profit on another and you still take part in speedily fought space battles in glorious 3D white on black.

On the 128 version, Firebird has included three special missions and to become an 'Elite' you must kill 6,000 ships, which seems an almost impossible task.

Firebird has also incorporated a couple of novel features into the new version. The first stops you from using the famous bug at the start of the game to amass thousands of credits in a matter of seconds.

The company has also made some concessions to players who find it difficult to stay alive before and after hyperspace travel from one planet to another. Just leave the space station in Lave — don't touch the movement controls — and slow down.

Select a new hyperspace destination, pull the joystick up to loop-the-loop and come back on a heading for the station. As you re-enter the station press hyperspace and you'll be transported automatically to your new destination. This feature doesn't work with all of the planets — you may crash into a station if you pick the wrong one.

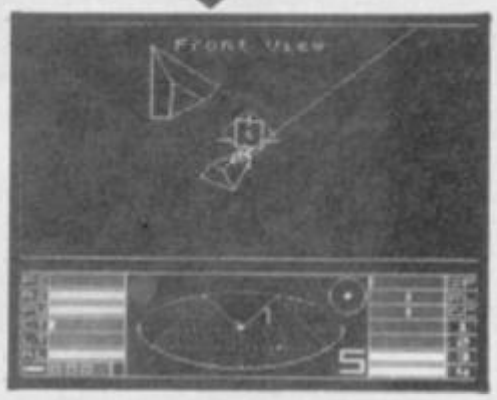
Otherwise the usual rules for playing **Elite** apply. You can select your moral class — you can be good or bad — and become involved in battles between space police and pirates if you become a rogue, trading in drugs and other illegal substances. You should be thoroughly wary of any ship which hoves into sight. There are nine major types some of which will require more laser blasts than others to destroy, or even be impervious to your missiles.

In the old **Elite** ships such as Vipers appeared from nowhere. More attention to detail in the new version means that ships appear from the hatches of space stations and, if you wait around long enough, you can knock them off as they exit.

You get a few credits — the universal monetary unit — for bumping off other ships if they're owned by pirates but the mega-credits are made in trade. The type of goods available on a planet depends upon geological environment, level of civilisation and type of administration, and you need to take these three aspects into consideration when you sell on a planet. For instance, you could sell computers to a culturally dormant society at a huge profit.

Elite is still as gripping as when it was first released. The shear volume of detail included — the histories of hundreds of races, details of planetary geometry, culture and government — make it still the most complex arcade strategy game ever devised ■

SINCLAIR USER CLASSIC



FACTS BOX

Re-release of a stunning arcade simulation. The yard-stick by which to measure other strategy games

ELITE
Label: Firebird
Author: Torus
Price: £14.95
Memory: 128K
Joystick: Kempston

Reviewer: John Gilbert

★★★★★

IWO JIMA

If you've ever wondered what it's like to leap out of a landing craft, charge up a sandy beach and hack your way through thick jungle, never knowing when you've going to blunder into some violent enemy yelling 'Banzai!', then PSS's latest wargame, **Iwo Jima**, probably isn't for you.

On the other hand, if you're looking for a decent strategy game which is going to test your military capabilities, then it probably won't be your cup of tea either.

It's not that **Iwo Jima** is a bad game as such — the implementation is really pretty good — it's just that there's nothing very inspiring about it. Just like the original battle, in which the US marine corp suffered hideous casualties invading the Pacific island heavily fortified by the Japanese, it's sheer unrelenting slog.

The playing area is about 60 characters by 25, and shows the island and surrounding waters. Water is blue (surprise!), scrubland is yellow, mountains are green and airfields are purple; also marked on the map are villages, quarries and minefields.

At the beginning of the game, you choose one of five levels: easy, moderate, hard, difficult or masochistic.

In the first turn you have to land ten units, each of which can be put ashore on any one of five invasion beaches. Your troops — the marines — are white squares with black symbols indicating type. To begin with, you have eight infantry units and two of tanks, but later you also get some artillery.

To order your troops, you either use a joystick or the 1, 2 and 3 keys. Left/right and 1 or 3 cycle through the various orders you can give your units, and fire or 2 actually commits you to doing something. Orders are *Attack*, *Move* or *Pass* (and at certain times, *Land*.) If you *Move*, the computer asks you in which direction, until the unit has used its movement allowance or you choose to have it stop. Tanks move further than infantry and artillery, and terrain is taken into account.

Once you've landed, some — but not all — of the Japanese forces will be revealed, either because your troops can see them or because the computer has decided to attack with them. Japanese land forces are shown in pink, and are either infantry, artillery, tanks or strongpoints. Some of them are very tough indeed.

All units on the board have an attack factor, a defence factor, a movement factor and a range as well as a unit identification. When a unit suffers damage, its attack factor is reduced: when it reaches zero, it ceases to exist.

If you order one of your units to attack, the computer will pick a Japanese unit in range and start flashing it in inverse video, at the same time asking if this is the unit you want to attack. Be careful as it's quite happy to ask you if you want to attack a unit and then, when you say yes, tell you it's out of range — which means that your unit loses its turn.

Unfortunately, the Japanese have bombers which attack your ships; although they are eventually shot down, they can damage your battleships and make them less effective. Similarly, there is a Japanese submarine which pops up and sinks your gunships. What's more, if it's stormy and the seas are rough, you can't land troops or use your gunships.

So far I've beaten the computer on the easy level, but got slaughtered on Level 3. To be quite honest, though, I wasn't really that fussed. I don't think I'll be taking my holidays on **Iwo Jima** ■

FACTS BOX

A competent, if old fashioned, piece of programming, but the game just fails to excite

IWO JIMA
Label: PSS
Price: £7.95
Memory: 48/128K

Reviewer: Gary Rook

★★★☆☆

BANG

WHAT . . . Bang is the new weekly newspaper for Computer Kids, tying the software world of the monitor screen to the outside world of video, films and music. BANG will be aggressive, demanding, humerous, investigative, sympathetic, colourful and spontaneous and will become a focus for the best freelancers and personalities from the entire world of entertainment.

WHO . . . Specialist Retail Press — publishers of CTW — Britain's Top Trade Weekly.

WHEN . . . BANG will be launched amid the razamataz of the PCW Show at Olympia on Sept 3rd 1986.

WHERE . . . WH Smiths, Menzies, major news agents, news-stands, and corner shops nationwide.

BUY BANG
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TRAPDOOR

ARCADE REVIEW

Usually licencing deals work like this: a film or TV series becomes very successful, and a software house pays several grand to use superficial elements of the plot in a software title.

Trapdoor has it all back-to-front. The game is out now and the TV show isn't screened until the autumn.

Trapdoor, the TV version, turns out to be a highly bizarre childrens' series. The plot involves a large furry monster called Berk and his attempts to feed the Thing that lives upstairs. Whilst Thing is sometimes contented with innocent pleasures like fried eggs on other occasions it demands yukky stuff like fried slimeys. The eating of unpleasant slimey and/or squidgy foods seems to be an obsessive theme in the program.

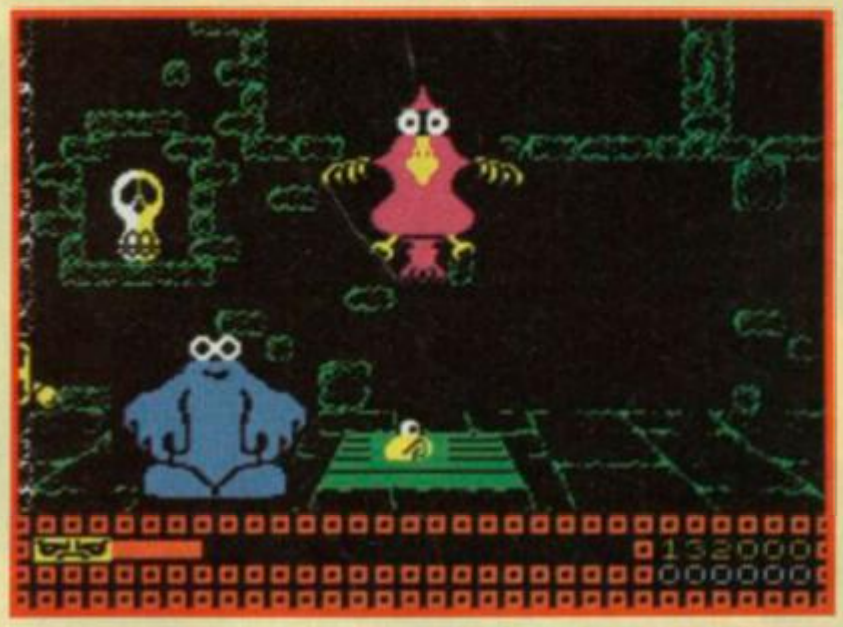
The computer game has been written for the new firm Piranha by Don Priestley (the ex-DK' Tronics **Popeye** and **Minder** programmer) and it's marvellous. So good, it actually makes me want to see the TV show.

The main characters in the game are huge sprites which are nevertheless very smoothly animated and, more amazing still, don't change colour as they move over different backgrounds. The inventive animation gives the assorted monsters a great deal of individuality. Berk really does seem slow and stupid but in a well-meaning monsterish way.

In the plot Thing gives Berk a series of tasks which must be accomplished within a time limit. Each task involves a number of separate actions, which though odd, follow a sort of bizarre logic. Trying to figure out what on earth you are supposed to do with what forms a good 50 per cent of the game. For example, when Thing asks for fried slimeys the first thing you need to discover is which of the large number of little monsters jumping and squirming around the screen are slimeys.

Trapdoor contains superb graphics with an ingenious plot. There are only half a dozen or so screens to explore but that isn't the point. This is not a game of the platforms and ladders school. In fact in the way that it requires a problem to be solved via a complex but logical series of actions reminds me of an adventure game.

That this 'adventure' features a large dopey looking monster, is based on a kids program involving cooking nasty meals may seem a major obstacle to its success. I hope not, it's the most original game I've seen for ages ■



◄ Stunning the bird produces an eggzagerated response ● How to stun? ● Perhaps the hapless creature and a sudden opening of the trapdoor could help ● Pick up bones (the skull) for clues

HINTS AND TIPS

- **Slimeys are not like worms**
- **Spooks can sometimes be spotted early by looking for their flickery half-image in the backgrounds**
- **Spooks can be usefully fed if you are holding something edible when they zap you**
- **Bones (the skull) can, if you get totally stuck, give you helpful clues merely by having Berk pick them up. The 'price' of each clue is the loss of some of the points you could have gained.**
- **Use your imagination and apply lateral thinking. For example putting things on the trapdoor and then quickly opening and closing it can form a kind of launch mechanism**
- **There are at least two ways of heating things: with the stove and by using the fire breathing monster**
- **Always close the trapdoor and always get rid of any monster once you have 'used' it**
- **To abandon a task and start again move Berk through the open trapdoor. This is the equivalent of monster suicide**
- **To get objects into other objects that are too high to ordinarily tip things into, you could get up on to a balcony and tip them in from there**
- **Try everything, some of it may work!**

SINCLAIR USER CLASSIC

◄ A pot for cooking things ● But how to get them in the pot? ● What to carry them in? ● Perhaps there are other ways to get objects into the pot than simply walking up to it

TRAPDOOR

The key element of the game. Beneath the trapdoor lurks an assortment of oddly shaped monsters. You introduce them into the game by opening and closing the trapdoor. Some are vital for completing the tasks. Most, though, are useless and either irritating or dangerous. For example, the very peculiar fire-breathing monster is sometimes necessary to heat things up, but equally when let loose on the world it trudges around after Berk snorting fire at him. Once released, the assorted nasties can be very difficult to round up and get rid of. Open the trapdoor with care and shut it down again as soon as you can.

FACTS BOX

As original to play as it is to look at. Trapdoor may be one of the most imaginative games of the year

★★★★★

TRAPDOOR

Label: Piranha

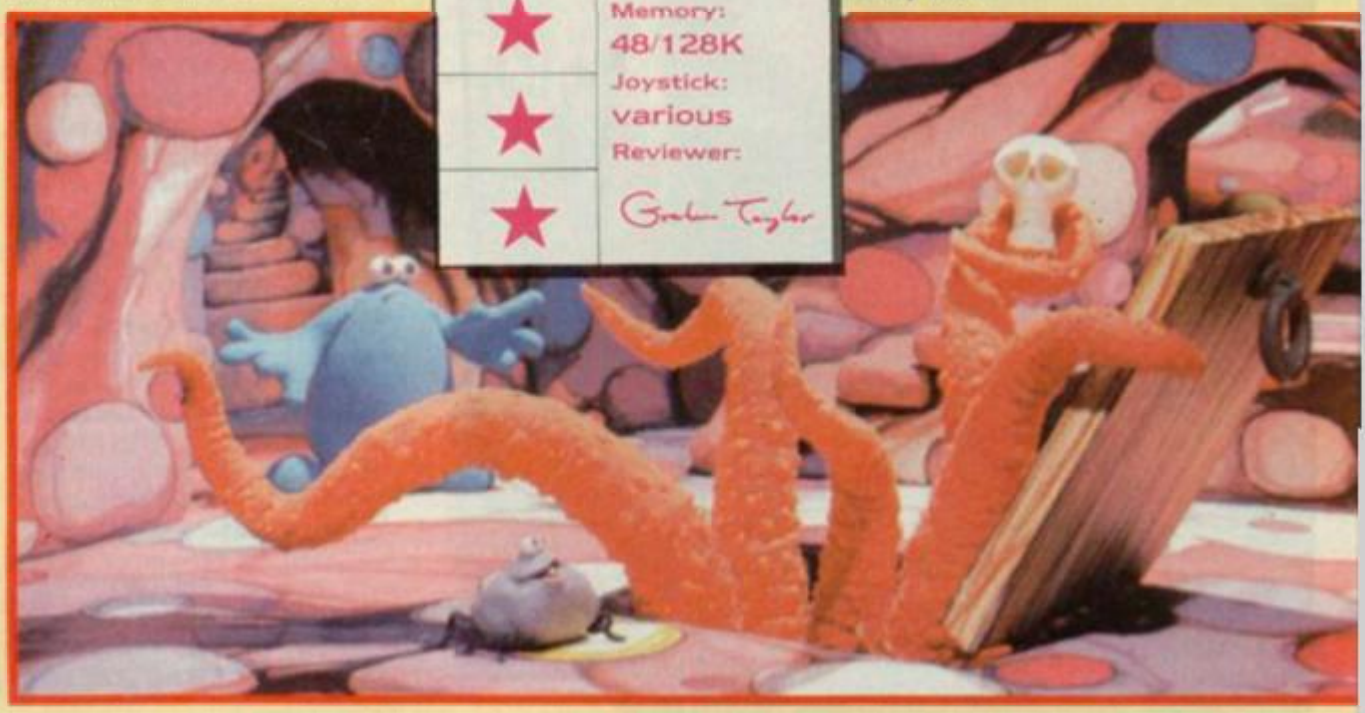
Author: Don Priestley

Price: £7.95

Memory: 48/128K

Joystick: various

Reviewer: Graham Taylor



POWER PLAY

Clare Edgeley zaps, dodges and dies to find this year's cult coin-ops

The arcades have always been the inspiration for the very best micro games.

The thinking goes that if a title works as a coin-operated machine it will sell on a micro, and most top software houses keep a very close eye on the arcades making sure they know just which titles are hot at the moment.

In the early days programmers used to just blatently lift whole game ideas and use them in their own games. Understandably coin-op giants like Atari, Sega and Konami weren't impressed. With copyright laws strengthened Atari was the first to act with its famous law suit in the US against Commodore itself over infringement of **Pacman**.

These days it's a mad scramble to tie up micro rights to the hottest coin-op titles, with software firms like Elite, US Gold and Imagine paying out tens of thousands of pounds to capture the biggies.

Look in the arcades this month and see what you'll be playing on your micro next month. **Paperboy**, **Xevious**, **1942**, **Indiana Jones**. They're all coming to a micro near you, soon!

ARCADE

Gauntlet: coin-op version ▶

The reason software firms have always looked to the arcades for inspiration is quite simple. Programming a game is the easy bit. It's the idea and gameplay that are so difficult to get right. If a game has been a hit as a coin-op it must have great gameplay, so by association it will be a charting micro title.

The biggest problems when setting out to convert any title frm the arcades to the Spectrum is the limitations of the micro's technology.

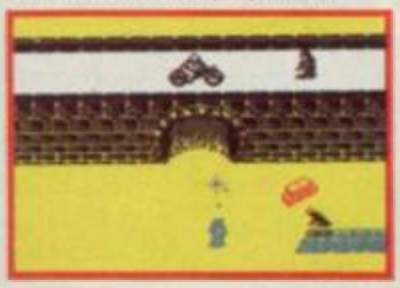
A typical coin-operated machine may cost several thousand pounds and it will have been designed from the ground up — both hardware and software — to play a particular game.

You can build a lot of game into a machine costing over £2,000 each. All the limitations of the Spectrum — memory, sound, full-colour hi-res graphics — don't really exist for the arcade game designer. They have custom graphics and sound chips that make an Amiga look like a ZX80.

How do you take something as complex in gameplay and cartoon-like in graphics as **Gauntlet** or **Indiana Jones** and squeeze it into 48K?

The answer is you have to compromise. Fewer screens, simpler graphics and restricted game play. Programmers working on arcade conversions are encouraged to play the machines till they know them like the back of their hands before even beginning to think of coding. Then a few screens are selected — better to take four and do them well than six and do them badly. The trick is to reduce the level of graphic complexity without losing the 'feel' which originally made the coin-op a hit. The Elite titles **Commando** and **Ghosts 'n' Goblins** are both good examples where the character graphics have been simplified and the number of screens has been considerably reduced but in such a way as the gameplay is not significantly affected.

Commando: coin-op Spectrum

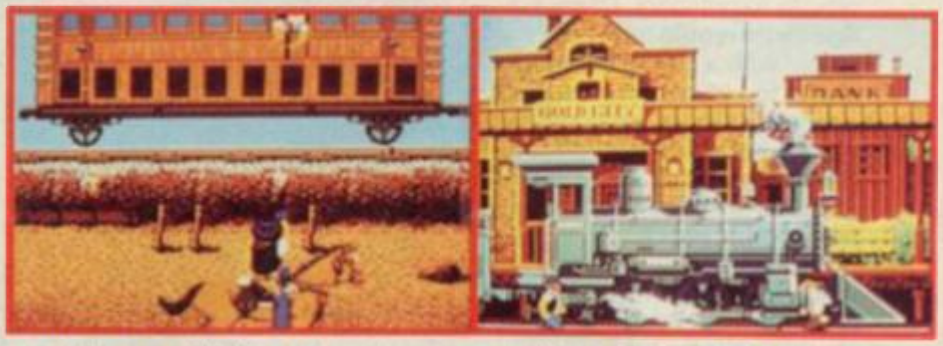


▲ Indiana Jones: coin-op version

US GOLD

US Gold has obviously been very busy and has got five popular titles under its belt. The prize is **Gauntlet** — Atari's brilliant four-player game involving running battle against the ghosts, ghouls and monsters. Pick up keys for access to new levels and food for energy. Simultaneous play for four can't be done on the Spectrum, but plans are afoot to produce a two-player game where each player selects one of four characters. **Gauntlet** is a wonderful game with incredibly fast action, and US Gold is trying to fit as many features into the computer versions as possible.

A number of companies approached Atari for the licence to **Indiana Jones and the Temple of Doom**, and once again, US Gold's got the deal. **Indiana Jones** features four or five scenes from the Harrison Ford movie — for instance action sequences like the hair-raising rollercoaster escape in quarry carts — and the computer game will be following the same style. The graphics are realistic and colourful. For protection Indy has his trusty bullwhip which he uses to knock the guards into touch.



Xevious, from Atari, was a huge success way back in 1982 and is a space shoot 'em up. Since that time, lots of coin-ops have been released bearing some resemblance to the original, but this is the first time that it has been officially licenced to US Gold. Flying over a varied landscape of forests, rivers, airfields, oceans etc you have to knock out the aliens' energy stations and demolish their forces in a series of hard-fought battles. Eventually you'll come face to face with Andor Genesis — the monster mother ship and to destroy it you must blast its core.

Express Raider from the Data East coin-op is set in the wild west with you playing the bad guy. Being a robber of great note, you decide to go for the huge payload of gold which the railroad is carrying. There are a number of scenarios in which you ride up to the train, climb on to it (shooting all the time), chuck the guards off the roof and nick the gold. Sounds simple. Again it's US Gold who's got the licence.

Express Raider: coin-op ▼

US Gold's final game conversion is of Data East's **Break Thru** — a game which has much the same scenario as the movie *Firefox*. The idea is to steal the PK430, a secret plane of vital importance to your country. You go in by car and hopefully come out flying. On the way you'll have to break through five enemy strongholds of mountains, bridges etc, avoid landmines, helicopters' missiles, flame throwers and the like. Packed with action, it'll be interesting to see how much US Gold can squeeze into the Spectrum memory. ▶

▼ Break Thru: coin-op version

▼ Xevious: coin-op version

ARCADE

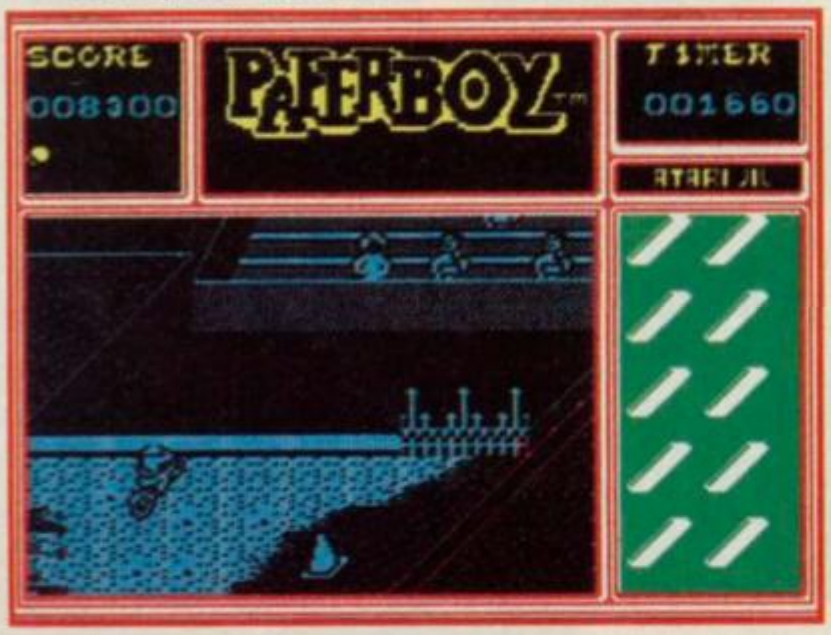
ELITE

At the ATE Show — the coin-op trade show in January this year, Atari's **Paperboy** took pride of place. It's all about the hazads of doing a paper round and instead of the normal joystick on the arcade machine, there are bicycle handlebars. Of course, a Spectrum would look pretty stupid with a pair of handlebars on the top (even if it could be done) but other than that minor point, Elite is doing as close a copy to the original as possible. The idea is to dodge brawling neighbours, get out of the way of the Hell's Angels, maniac drivers, skateboarders on the pavement etc, and throw the morning papers into the doorways of the houses that ordered them. For bonus points, smash the windows of those who haven't ordered your papers!

By October, Capcom's flying game **1942** will be looping the loop on your screens. After **Commando**, **Bomb Jack**, **Ghosts 'n' Goblins** and **Paperboy**, this will be Elite's fifth conversion and they've got several more in hand.

▲ Paperboy: coin-op version

Paperboy on the Spectrum ▼



1942 is an air battle centred over an aircraft carrier whch you have to defend from the enemy — could it be the Japanese? There are 32 difficulty levels and about eight terrains to fly over. Blast the enemy aircraft out of the sky and dodge their missiles, if necessary by looping the loop. Fuel must be picked up to stay airborne and you can increase your weapons power by collecting bonus points and exchanging your plane for bigger and better models. A huge game, and by all accounts Elite is attempting to get most of the features from the original on to the computer version.

SOFTWARE PROJECTS

Dragon's Lair, the first laser disc game ever launched by Atari in 1983 has always been one of my favourites, and Software Projects has the rights. Featuring the idiotic Dirk the Daring — a blundering nitwit — you've got to enter a trap-ridden castle and free

▼ Dragon's Lair on the Spectrum

Princess Daphne from the dragon's clutches. The game boasts some marvellous graphics, and because of the laser disc, there's a random element in the way it's played. In the coin-op version the laser disc takes Dirk through the game and you play a secondary part by pushing him in the right direction. There's no way that could happen on a computer and in Software Projects' version, you control Dirk throughout. Sad as it is, the game's not a patch on the original. That's on the Commodore. We've yet to see the finished Spectrum version.

1942 coin-op version ▲

THE EDGE

Shao-Lin's Road from Konami carries on the Kung Fu theme and is being converted by The Edge. It's bright, colourful, and the characters in the coin-op version are fairly small and chubby. You've been captured by the all-powerful Triad and locked up in their temple. Basically, you've got to kick your way to freedom and use your secret powers to overcome the Triad. There are several levels to the temple, and once out of it you've still got to travel Shao-Lins's Road to freedom.

▲ Galvan: coin-op version

OCEAN

Ocean's managed to get hold of crop of licences too. All from Nichibutsi, they're **Galvan**, **Terra Crest** and **Mag-Max**, to be released in that order.

Galvan is a levels game, played in underground caverns where you've got to destroy the baddies, and pick up shields and extra power whenever possible. Power is represented by scattered coloured pyramids and these you have to walk over. To reach some, you may have to use springboards, others are placed on seemingly inaccessible ledges. All the while you're being bombarded by waves of nasties. And if you're really lucky you'll be able to transform yourself from boy to knight in armour.

Terra Cresta is next, possibly even after Christmas. It's another space battle in which dinosaurs and space stations jostle with each other in an odd quirk in time. The game scrolls vertically and you have to fight off waves of aliens. By the press of a button your ship will split into five smaller ones, giving you greater fire power. Simple and yet challenging — it should make an excellent game on the Spectrum.

Lastly, there's **Mag-Max**. It's also fairly simple and you play a robot which is inclined to lose its head. And not only its head, but its legs, body and arms as well. In fact it falls to bits at the slightest hint of opposition from the enemy and then has to run around collecting itself together again. Once fully assembled, it can move at a tremendous pace firing from the automatic lasers embedded in each arm. It's quite an art to keeping it in one piece ■

COIN-OP GAMES CHART

1	Gimme a Break	*Bally/Sente*
2	Nemesis	*Konami*
3	Hang on	*Sega*
4	Ikari Warriors	*SNK*
5	Geat Gurianos	*Taito*
6	Halleys Comet	*Taito*
7	Super Sprint	*Atari*
8	Demolition Derby	*Bally*
9	Comgolf	*Prototype pre-release*
10	Arian	*SNK*
11	Yju	*Irem*
12	NY Captor	*Taito*
13	Trojan	*Capcom*
14	Salamander	*Konami*
15	Arkanoid	*Taito*

Figures compiled from receipts from one top London West End amusement arcade. The figures should not be regarded as a nationwide survey. Compiled for Coin Slot magazine

▲ Terra Cresta on the Spectrum

Just how well do coin-op games convert to the Spectrum? Some are barely recognisable, others are sheer genius — almost identical.

Next month Clare Edgeley compares the top Spectrum conversions with their coin-op originals and finds out just how they match up.

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Converting data into marks on paper

Andrew Hewson processes words on print problems

Face to face with Andrew

Sorry! James Baldock of Waterbeach in Cambridge is not pleased. He writes: **I have always found your excellent column in *Sinclair User* interesting. Well now, that sounds good doesn't it. But wait — here's the sting in the tail. Why is there always a huge picture of your head somewhere on the page filling up space which you could put to better use?**

Ouch! Maybe it's just that I've got a big head. Or perhaps the editor feels that he needs a picture of a handsome man to grace the page but he could only find a cartoon of me. There again it could just be a bad habit.

Seriously though, you may not have noticed that the size of the typeface has shrunk in recent months so that more written material now takes up less space. Some of the space gained is now used for answering even more of your letters and some is used for decoration — such as my mug-shot. You should feel lucky, James. The very first issue of *Sinclair User* had a great big colour photograph of me plastered across the middle. I nearly died when I saw it and it was months before I could open that first issue at the *Helpline* page without falling over with embarrassment.

Nowadays, of course, I am much tougher so I'm offering a free Hewson program of your choice to the first person who can send me a copy (or photocopy) of that first *Help-Line* column complete with photograph. So get digging in your attics. In the meantime a copy of **Pyracurse** is winging its way to you, James. I hope it's some consolation for tolerating my less-than-pretty face.

According to my post there are a lot of people having problems connecting a printer to the Spectrum.

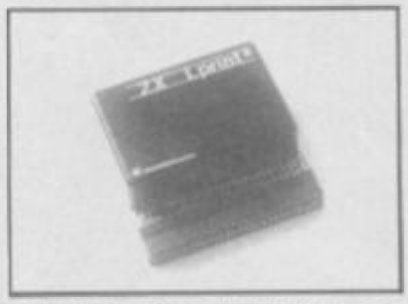
A month or two ago I explained how an interface is required when connecting together two pieces of computer equipment, and that there are two common standards for connecting printers to computers. The two standards are called, for historical reasons which are interesting but not particularly revealing, 'RS232' and 'Centronics'. The RS232 system was not specifically designed as a printer standard — Centronics was. Consequently, Centronics is more widely used with printers.

The RS232 standard is a rather loose 'standard' and so it can be a bit difficult to get a particular combination of interface and printer working. The data is sent 'serially'. This means that each bit of each successive byte is sent in turn down a single wire rather like a group of people walking in single file along a narrow track. A second wire is then used by the receiving device to signal that it is ready to accept the next byte of data.

To match up two particular pieces of equipment several of the conditions may have to be varied. For example, the number of 'stop bits' which are sent to signal to the receiving device that all the bits for a given byte have been transmitted can be changed. So can the system of error checking and the rate of data transmission. It can be a bit of a struggle to get all these items correct.

A particular advantage though, of an RS232 interface over the Centronics is that it is bi-directional. That is, data can be sent through the interface in both directions. This is of no use when connecting a printer to your computer (because a printer never sends data to the computer) but it is a different matter if you want two computers to talk to one another. This is a situation where the RS232 system comes into its own. The RS232, although used for connecting some printers, is mainly used for communications, networking and connecting up devices such as modems.

The Centronics interface system, on the other hand, was specifically designed for connecting a printer to a micro-computer and the data is sent in 'parallel'. In other words eight wires are used to carry the data so that all eight bits of each byte are transmitted at one go. This is like a group of eight people walking side by side instead of one behind the other as in the RS232 system. As a result the data is sent more quickly because the interface simply 'posts' each byte in turn rather than breaking the byte into individual bits to be 'posted' singly.



The LPrint interface with both Centronics and RS232

Inside Interface one

The only snag is a Centronics interface isn't any use for connecting anything other than a printer.

Check it out — a computer program to compute the computer

Is it possible asks Mark Johnson of Leighton Buzzard, **to write a program to check if my computer works properly? Sometimes it crashes when running a program for no reason at all.**

Part of the fun and part of the pain of computing are the unexpected faults that occur. To be honest, memory faults do not occur very often. It is much more likely that your problems are due to errors in your software or even glitches in the power supply. Nonetheless a memory checking program is fairly quick to run so it is worth doing so if only to put your mind at rest.

Checking Ram involves setting every bit of every byte

Table 1. A Spectrum machine-code program to test each memory location between the beginning of the spare space (marked by the STKEND system variable) and the bottom of the stack

Hex code	Assembler code	Comment
2A 65 5C	LD HL, (23653)	Set HL to address of spare space
44	LD B, H	Copy HL
4D	LD C, L	to BC
3E OO	LD A, O	Set A to O
77	LD (HL), A	Copy A to memory
7E	LD A, (HL)	Copy memory back to A
FE OO	CP O	Compare result
CO	RET NZ	Return if error
3E FF	LD A, 255	Set A to 255
77	LD (HL), A	Copy A to memory
7E	LD A, (HL)	Copy memory back to A
FE FF	CP 255	Compare result
CO	RET NZ	Return if error
A7	AND A	Clear carry flag
23	INC HL	Increment HL
ED 72	SBC HL, SP	Subtract stack pointer from HL
C8	RET Z	Return if finished
A7	AND A	Clear carry flag
ED 7A	ADC HL, SP	Add stack pointer to HL
03	INC BC	Increment BC
18 E7	JR −25	Repeat for next memory location

Graham Close, Blewbury, Oxfordshire

Interfaces, printers and discs

Corporal Kilshaw stationed with the RAF in Germany raises a number of questions about interfaces. **Which Centronics interface should I buy? Will it work with any printer that has a Centronics interface? Both the Opus disc drive and the Wafadrive have built-in Centronics interfaces. Can they be used with any Centronics printer? Can the interface, the drive and the printer be used with any other computer?**

There are several Centronics interfaces available for the Spectrum and I have no particular reason for recommending any particular make because they should all work with all printers with a Centronics interface. If you have several other items to connect to your computer — for example a joystick interface or a disc interface — then you should consider buying one with its own power supply.

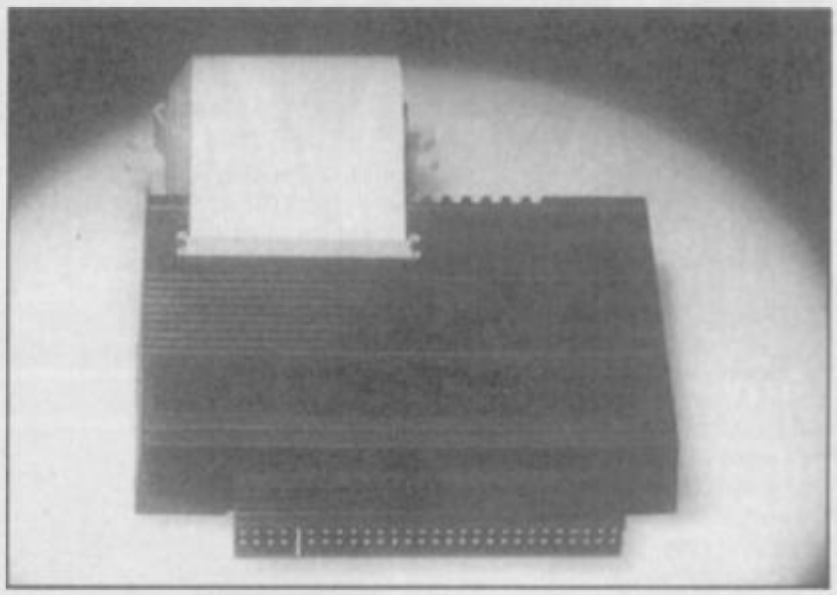
There are problems associated with having a string of boxes stacked on the end of the Spectrum edge connector which is neither robust nor electrically infallible. It is all too easy to overload the Spectrum power supply if you have several extra devices plugged into the edge connector all drawing their power from the main unit. In my experience this can lead to unpredictable failures in particular parts of the chain even though the individual units work satisfactorily when connected separately to the computer. Hence, if you have lots of equipment 'piggy-backed' on your Spectrum already, my preference would be to choose interfaces which have their own power supply even though they tend to be more expensive and you end up with a tangle of "knitting" behind your computer.

Neither the Opus disc drive nor the Wafadrive can be used as they stand with computers other than the Spectrum. If you are concerned about using some kind of disc system with both a Spectrum and some other computer then it is worth considering the Technology Research disc interface. This design of interface can be used with Cumana-style 5¼ inch disc drives. These drives can in turn be used with other computers including, in particular, the BBC.

Given the continuing state of flux of the home computer market, though, I would not personally spend money on any disc system with the expectation of re-using the same equipment with another computer in a year or two's time. You might be lucky and guess right of course but I wouldn't bank on it. My instinct would always be to buy for the present, not for the future.

With printers my attitude is different. The chances are you will be able to carry your printer foward to any future micro. I would aim for a machine with both an RS232 and a Centronics interface if possible, or if not that then a Centronics interface alone and assume that one or other system would be available on any computer that I bought in the foreseeable future.

See last month's copy of *Sinclair User* for a guide to some of cheaper options around. All of the printers mentioned there should be fully compatible with any computer having the correct interface.



The Kempston Centronics interface

Table 2. A Spectrum program to load 30 two character hexadecimal codes into the printer buffer

```
10 FOR I=23296 TO 23325
20 INPUT Z$
30 IF Z$="S" THEN STOP
40 PRINT Z$;" ";
50 LET Z$(1)=CHR$ (CODE
   Z$(1)-7*(CODE Z$(1) 57))
60 LET Z$(2)=CHR$ (CODE
   Z$(2)-7*(CODE Z$(2) 57))
70 POKE I, 16*CODE Z$(1)+CODE
   Z$(2)-816
80 NEXT I
```

and checking that it remains set, and then resetting every bit and checking that it then remains reset. Setting every bit in a byte is equivalent to *Poke*ing 255 into that byte. Similarly, every bit is equivalent to *Poke*ing in 0.

Obviously it isn't possible to *Poke* numbers into every memory location whilst the machine is running because the computer will crash, but a partial check can be made by testing every location in the spare area of memory. The program in Table 1 runs such a check. It can be loaded using an assembler or using the simple hexadecimal loader listed in Table 2. The program checks every location up to the bottom of the stack and returns the address at which it stops — about 32575 in the 16K machine and 65343 in the 48K machine when they are working correctly.

Find out the height of your byte

David Cattanach has written again. **Thank you for spelling my name right, does this mean you can read my typing?** Yes, amazingly enough, I can, but you should see the state of some of the letters I receive. What's your question? **One thing I am extremely puzzled about is high and low bytes. What are they? What's the difference?**

My fault. I should have explained in more detail. Calling bytes 'high' or 'low' is just a shorthand piece of jargon. There is no physical difference between them at all it's just one of those things which gets assigned in a particular context and then gets forgotten.

Most readers will be aware that the memory in the Spectrum is divided up into 'bytes' each of which consists of eight 'bits'. Each bit can be set in one of two ways only so that the eight bits forming any given byte can together be set in 2 * 2 * 2 * 2 * 2 * 2 * 2 * 2 = 256 ways. In other words, if you want to use a byte to store a whole number, there are only 256 different numbers that can be stored. Normally the numbers are 0, 1, 2, 3, . . . , 255.

This is all very well but computers would be very boring if they could only count up to 255. So bytes are often grouped into pairs so that the machines can count up to 256 * 256 = 65536. (Actually they only count up to 65535 — you have to knock one off to be used for storing zero.) When a pair of bytes is used for storing a large whole number in this fashion you can work out the number by *Peek*ing both bytes as follows:

PRINT PEEK (first byte) + 256 * PEEK (second byte)

On this occasion I have called the two bytes 'first' and 'second' but it is more usual to call them 'low' and 'high'. That's all there is to it.

If asked then answered

Janet Moss of Cheshire has a problem with *If* statements. She doesn't know it yet which is I suppose why she has written to me, but it's true. She's written a Basic program which goes roughly like this;

```
10 INPUT A$
40 IF A$ = "A" THEN GOTO 100 : IF
A$ = "B" THEN GOTO 200
100 PRINT "100"
110 STOP
200 PRINT "200"
210 STOP
```

I've cut out all the other bits and pieces in her program to make the problem area easier to identify.

Janet complains: **Whatever you type in the program always goes to Line 100.** I'm not surprised, Janet, because if you read the relevant part of the Spectrum manual carefully you will see that it refers to the evaluation of the condition in an *If* statement in these terms. ". . . if it is true that *A$* = "A" then statements in the rest of the line after *Then* are executed, but otherwise they are skipped over, and the program executes the next instruction."

Now, if you look at Janet's program again you will see that if it is true that A$ = "A" then the program jumps to Line 100 from the *Goto* 100 command. However, if *A$* = is some other character so that the condition is not true then the program does not execute the second statement in the line. Instead control passes to the next Basic line, which just happens to be Line 100.

The point is that any statements after an *If* statement are only executed if the condition in the *If* statement is true. If the condition is untrue any subsequent statements in the same Basic line are ignored.

ARCADE REVIEW

KUNG FU MASTER

Kung Fu Master is not exactly a market leading release. There must now be more versions of martial arts games for the Spectrum than there are versions of **Pacman**, and will soon be versions of **Gauntlet** (check your lawyers boys).

Kung Fu Master turns out to be rather tedious, contains nothing you won't have seen before and is really not all that well programmed — especially since it's been converted from the Data East coin-op. The central element of any Kung Fu game must surely be the fighters themselves. If they look good, move smoothly and are nicely animated between the various attacking postures then the chances are you'll feel involved with the action and the game will be addictive. On the other hand, if they are small, flickery, change colour according to background and with fighting postures which look like indistinct blurs of assorted pixels, then you have what is known in Kung Fu terms as an absolute dodo. With **Kung Fu Master** we're talking blurs.

It's a scrolling game. Teams of enemies line up one after the other and assault you (the Kung Fu Master) as you try to move across the screen. Fight off various assailants, avoid assorted obstacles like knives, mystic globes, killer bees and snakes, and finally rescue the usual fair maiden in the final screen. The background is a sort of orientalish-looking passageway and it's OK apart from changing colour as you move past parts of it.

▲ Fists meet fire as the Dragon attacks

Actually playing the game is nothing like the same sort of test of skills as **Way of the Exploding Fist**. It's a case of quantity rather than quality. The vast majority of the flickery baddies can be felled by one or two blows. True they fight back if you sit there and do nothing, but otherwise the point when you die in the game is more a question of being worn down by attrition rather than by a skillful blow. Rather like a conveyor belt they just keep coming and sooner or later you make a mistake.

A good portion of the game is actually a straight-forward dodge game in disguise — many objects can be avoided by carefully timed jumps and sometimes the punches and kicks are simply the physical equivalent of laser zaps, ie, if you press the fire button at the right time you'll survive — judgement, strategy and combinations of blows aren't required.

Although I have some doubts about how necessary the assorted movements and directions are, the system for selection between them is intelligent. The joystick controls left, right, jump, squat; with the fire button pressed you get a series of kicks in the indicated direction and these can be toggled to punches by also pressing the keyboard space bar.

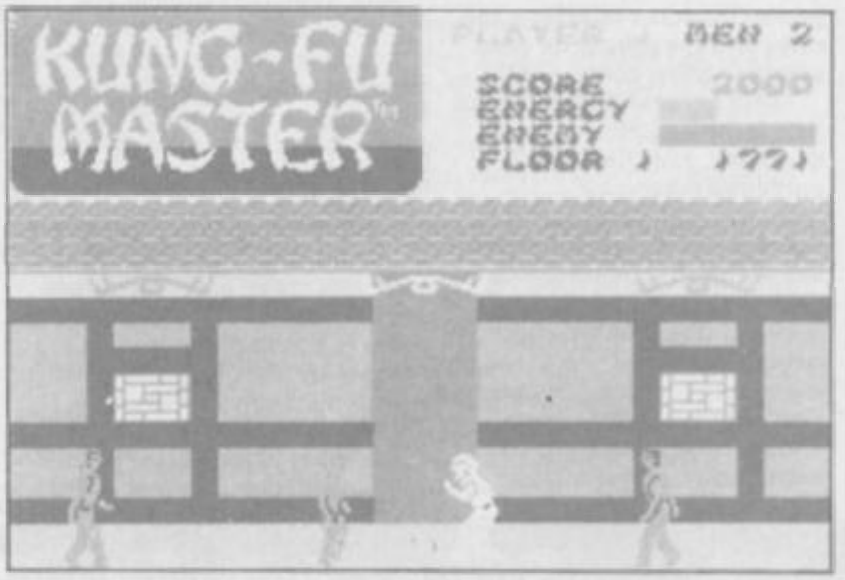
Kung Fu Master looks like it ought to have been a budget release to me. The game is, I think, one of US Gold's conveyor-belt conversions. The Commodore original was considerably better and the problems with the Spectrum version seem to stem from the conversion programmers simply not bothering over much to try and get the best out of the machine.

I wouldn't bother over much going out to buy it. At £7.95 it's just too steep ■

FACTS BOX

A routine conversion from the C64 on which little genuine thought or effort seems to have been expended

KUNG FU MASTER
Label: US Gold
Author: David J Anderson
Price: £7.95
Memory: 48/128K
Joystick: various
Reviewer: Graham Taylor
★★☆☆☆



GHOSTBUSTERS

Ghostbusters again. Impossible but true. The final version (Activision promises) of the hottest title of yesteryear is out about now — for the Spectrum 128.

For me, Ghostbusters was never a game, always a title screen. When the C64 version first turned up nobody could believe the music, it was funky. I watched those opening credits over and over again as the little dot bounced over the words to the song. The game I could always do without. For obvious reasons the Spectrum version was a bit of a let down.

On the Spectrum 128 things are different. Back comes the bouncing blob, the words, and yes, FUNKY MUSIC. The three-channel sound chip squeaks its little heart out and it's good, not brilliant but good. You could even dance to it.

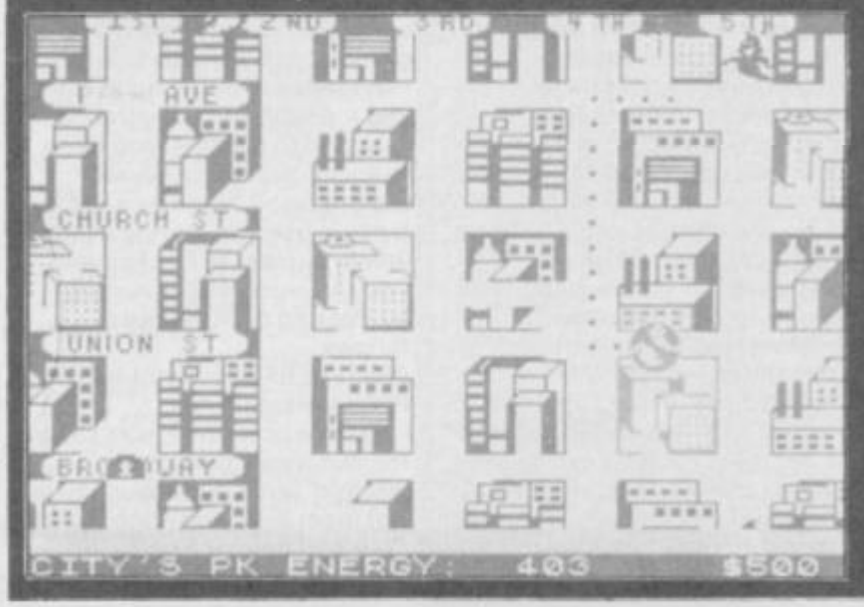
The game is the same as ever — broadly a management style activity with arcade side effects. Equip your ghostbusting mobile, check the map for ghost activity, trap the ghosts and earn money for more car gear. No change in the way objects gleefully change colour, the graphics still look a bit unprofessional and I always thought the plot was pretty tedious anyway.

For those who have the 128 this game probably shows off its new improved sound abilities as well as, if not better than, anything else. The game itself is no better than a budget title, so at least two of the stars are for the soundtrack and that bouncing blob ■

FACTS BOX

Sounds great, looks very average. Best seen as a demo of the 128s sound chip. As such it's expensive

GHOSTBUSTERS 128
Label: Activision
Author: David Crane
Price: £9.95
Memory: 128K
Joystick: various
Reviewer: Graham Taylor
★★★☆☆



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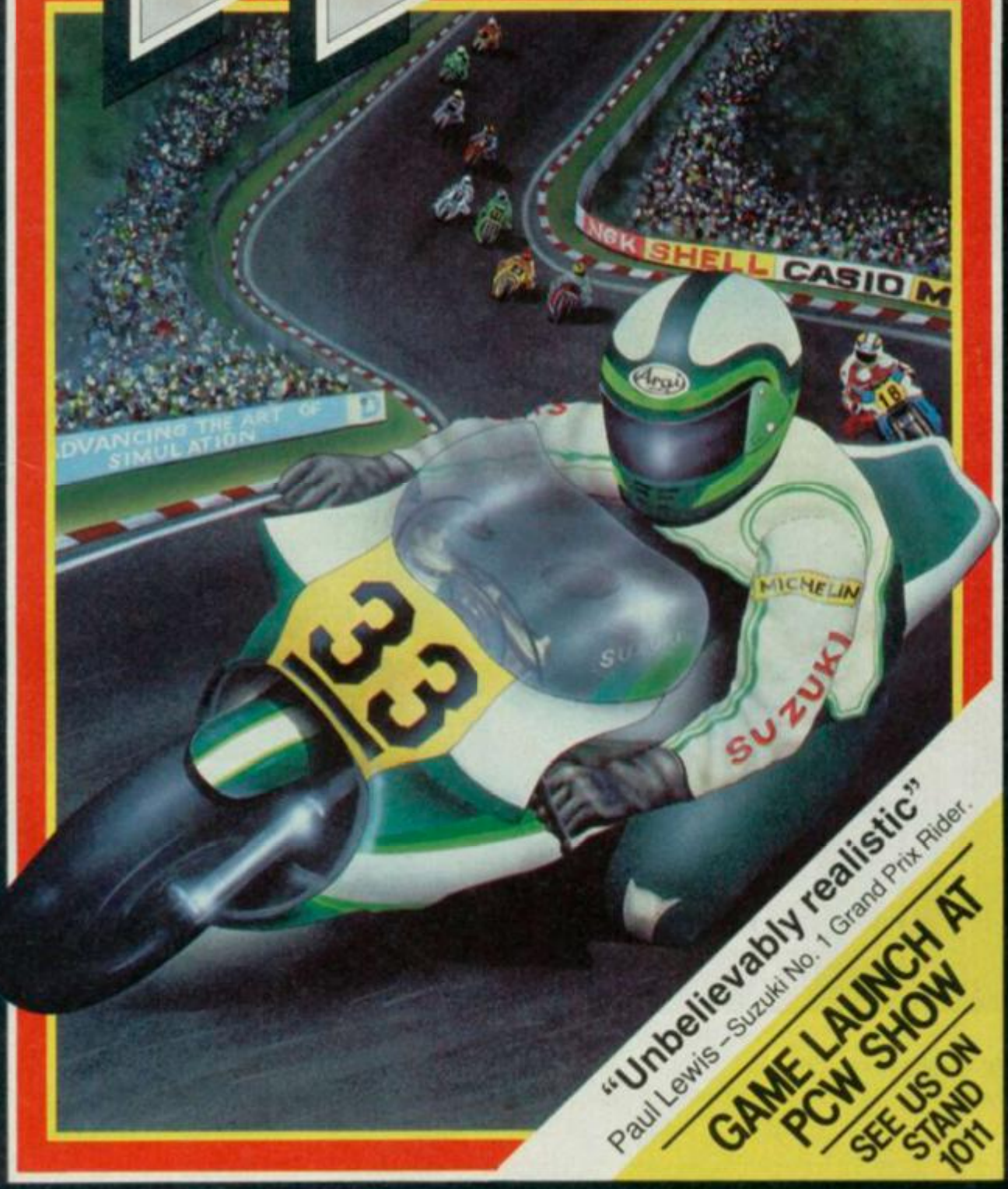

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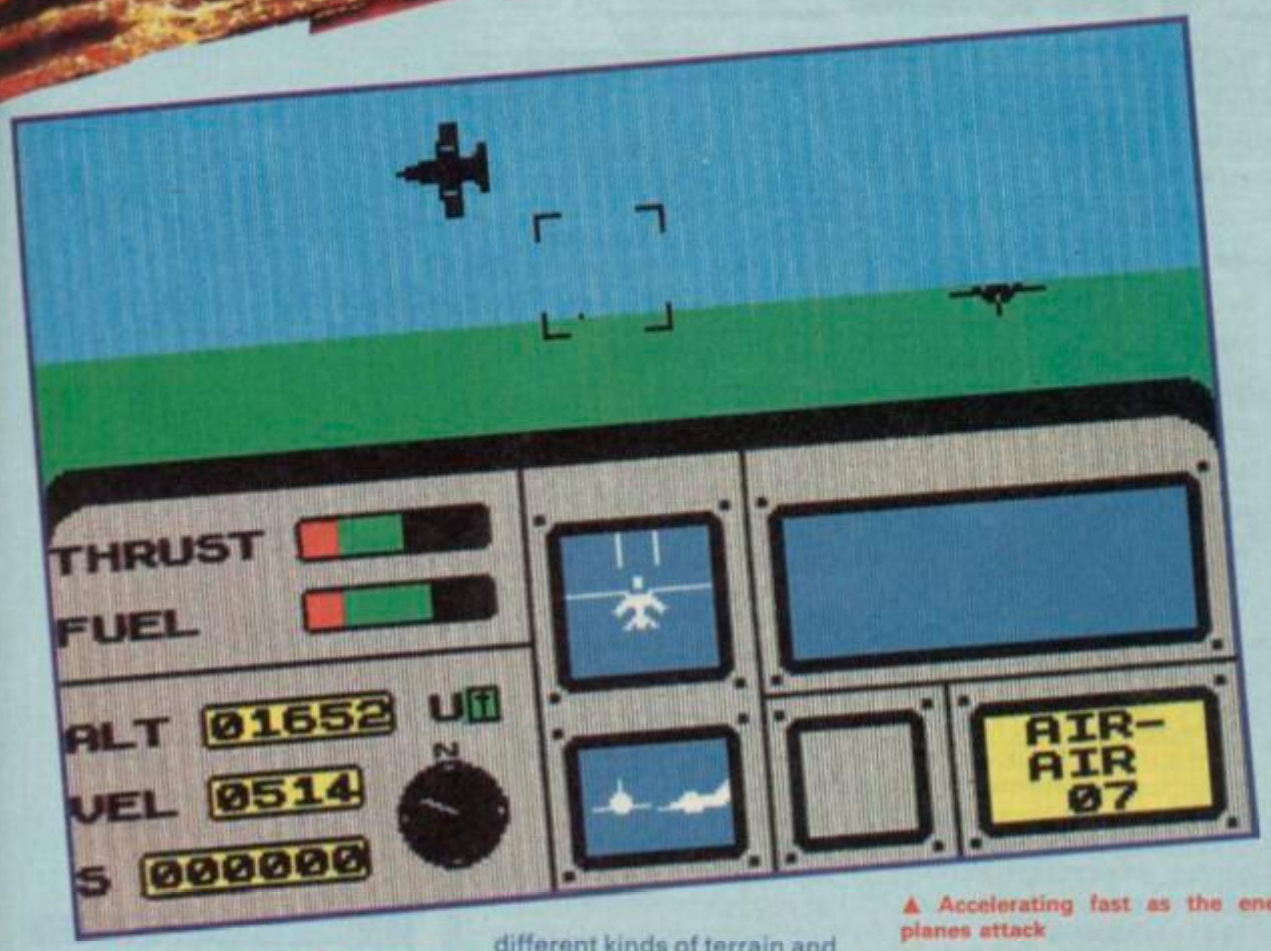


▲ Accelerating fast as the enemy planes attack

STRATEGY SIMULATION REVIEW

FACTS BOX

Fine flight simulator without too much fine detail to get in the way of what it's all about — blasting at speed

★★★★★

ACE
Label: Cascade
Author: Paul Laidlaw, Ian Martin
Price: £9.95
Memory: 48/128K
Joystick: Kempston, Interface 2
Reviewer: Graham Taylor

ACE

There are two sorts of flight simulator. Real flight simulators and fraudulent flight simulators.

Usually fraudulent flight simulators are better. The reason is simple, with a real flight simulator some programmers have spent ages constructing an almost exact reconstruction of the handling characteristics of a particular make, model and version of an aircraft. These are sometimes a triumph of the programmers' art and usually quite fantastically boring to all but the most enthusiastic armchair pilot groupies. I mean do you really want it to be several weeks and twelve pages of manual before you ignite the engines?

On the other hand, fraudulent flight simulations give you some sort of vague idea of flying a plane but keep controls down to the manageable level (higher, lower, left, right, power up/down). And they are usually bigger on fripperies like blasting things to bits and being attacked.

Ace, then, is an excellent fraudulent flying game. You get to blast things a lot. You also get to dock with refueling aircraft, launch flares, fly over different kinds of terrain and land and take off. Controls are kept down to a sensible level such that you don't need a pilot's licence before you can start destorying things.

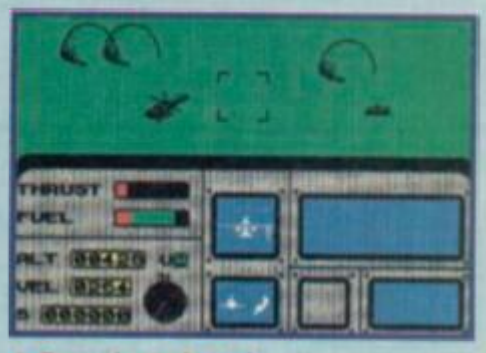
Ace offers a good mix of options aside from just flying and shooting down planes. You can shoot tanks. You can shoot ships. Appropriate weapons are selected via a simple menu system. In a particularly appealing sequence you also get to refuel in mid-air — if you can rendevous with the supply aircraft at the correct height and speed.

All this and there's even a plot of sorts. You are the lone pilot defending the free world against armed assault by land se and air. Enemy positions are indicated on a map which may be called up at any time. There is a logical sequence to the battle — you don't get to blast at ships until the other attack waves have been defeated.

Ace deserves the title simulation in the loose sense that you can manipulate the controls to fly the plane, do rolls etc, but it doesn't get bogged down in tedious details that would spoil the adrenalin-raising properties of the game.

It won't amaze you graphically but don't worry about that — you'll love it ■

▼ Call up the on screen map to check enemy movements



▲ Ground attack mode

GRAPHICS

At first Ace doesn't look like much at all. The opening scene of the runway from the cockpit window looks, it must be said, like a slab of green, a slab of blue and a slab of white. Things look up with some rather nifty enemy planes and tanks. It still won't blow your mind — no tricky three-dimensional stuff like Digital Integration or anything — but at least it doesn't actually detract from the game.

Terrain graphics are rather simple, land is a big splodge of green with occasional line drawings of trees. Water is a big splodge of blue with like line graphics representing breaking waves. It isn't as bad as it sounds. The important things look OK and that's what matters — the cannon fire streaks off into the distance, enemy fighters roll and turn and burst into flames. This is what we want . . .

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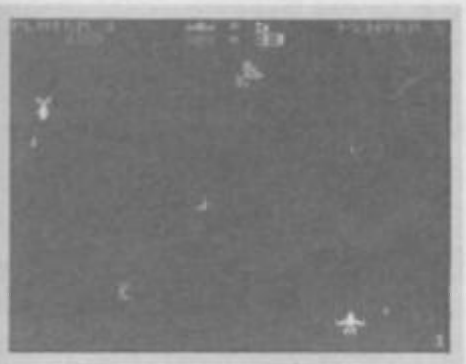


STAR FIREBIRDS

No question about it, **Star Firebirds** is a shoot 'em up. No frills, just things moving around the screen and you firing at them. It's closely based on **Galaxians** the ancient arcade hit that ruled the arcades several years ago (its still pretty big in Southend).

However, I was disappointed. The gameplay is authentic but the graphics are very poor.

The **Star Firebirds** themselves are dozens of multi-coloured birds that swoop around in curves and circles dropping bombs on your laser base. If you are smart you will move it.

FACTS BOX

A fair copy of the Galaxians arcade hit, but the miniscule graphics may well put you off

STAR FIREBIRDS
Label: Firebird
Author: Insight
Memory: 48/128K
Joystick: Kempston, Sinclair, cursor

Reviewer: Graham Taylor

★★☆☆☆

Survive long enough and you may get a visitation from the enormously large emperor bird which hovers around — blast it enough times and you get bonus points.

The game falls down with its graphics. Everything is small and unimpressive which seriously detracts from the appeal. I find it hard to get seriously interested in blasting when the thing I am to blast is not much larger than a pin prick.

Star Firebirds gets bonus points for being a faithful reproduction of the original acrade game and for having part of Stravinsky's *Firebird* suite moderately well played at the beginning of the game.

Buy it only if you are an addict of the original game or have an enormous monitor ■

ACTION REFLEX

Action Reflex is one of those games that is entertaining without being exciting. Technically there is nothing special to say about it, it boasts no new and impressive graphic routines, it doesn't feature artificial intelligence (however artificially) and it isn't going to win any prizes. On the other hand, I found it infuriating and had a severe attack of the 'just one more go'.

A bouncing ball looking suspiciously like the Amiga demo is the heart of the game (OK, it doesn't look much like the Amiga demo but it has got a checkered pattern on it). Learning to control the ball, which acts just like you would expect a bouncing ball to act is the art of the game. The challenge is provided by a series of odd but vicious traps which deflate both ego and ball simultaneously.

The ball movement is a subtle affair, bounce levels can be controlled quite precisely but don't drop immediately to zero when you wish them to. In other words, the super leap you build up to help you jump the tall funny statue type thing in one screen may also hurl you uncontrollably into the deadly fire pit in the next screen — get the picture?

There are some other features to the game. Some objects have to be acquired in order to pass certain obstacles. Useful objects are not collected but 'earned' — they are awarded automatically each time a certain number of points are achieved. Points are awarded for successfully negotiating certain obstacles.

Sound is rather minimal, just enough to give the audible impression of a bounce.

I do like the ideas behind the graphics, there are some touches of gloriously eccentric violence à la **Road Runner**. I particularly like the hidden boxing glove which springs from the floor and punches the ball straight into the prongs of what looks like a pitchfork.

That's about it really, the key to the game is learning how to work those bounces and learning what bounce patterns are required between certain screens. Nothing amazing but I liked it ■

FACTS BOX

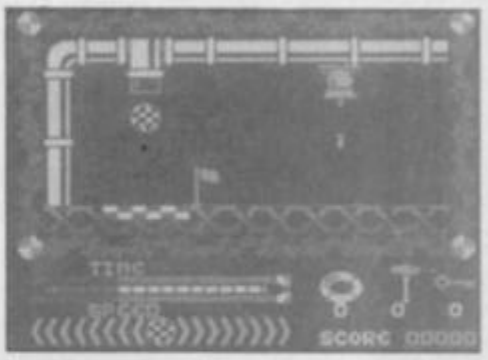
No prizes but rather entertaining. The sort of game that may still be worth playing this time next year

ACTION REFLEX
Label: Mirrorsoft
Author: Urquhart, Chubsly and Herman
Price: £7.95
Memory: 48/128K

Reviewer: Graham Taylor

★★★★☆

ARCADE REVIEW



CON-QUEST

Whilst Mastertronic is clearly blazing some sort of budget path through the software industry, forcing everybody to reconsider just what to expect at what price, not all of its programs are of equal standard.

The problem with attempting to seriously criticise Mastertronic's stuff is that unless the program in question is actually appalling it seems churlish to winge too much about something that costs £1.99 or £2.99.

Con-Quest is a £2.99 Mad title. Presumably therefore it is supposed to be a little above the norm. It's not exactly a rip off but I doubt that you'll get all that much from it even at £2.99. The astounding thing about **Con-Quest** is its programmer — Derek Brewster — one of the more respected names in the industry for titles like **3D Death Chase** and **Full Throttle**. This game looks like it was knocked up in a couple of days by someone with little imagination and not all that much skill. "Save Oscar's soul from the torment of walking through the eternal fires of Hell", is what it says on the box. It seems a reasonable request but I found myself leaving Oscar to fry at ever earlier intervals. Oscar is . . . well, I don't know what, but it's got two legs and a big head, and there are a large number of flickery sprites. The box says they are animated, but I'd say they zoom around the screen as though shot from a cannon. Some of them are sort of snakes, some of them are sort of dragons, all are certainly very wh***y.

The chameleon-like sprites (they change their colour to match the background) whizz around the standard Ultimate-style medieval castle with the usual Ultimate stairs up which you slide (?) and with accepted Ultimate fitments like caskets, books, axes and fountains. Oscar finds objects, picks them up, drops them and uses them — some open things, some are weapons one is a sort of protective globe.

In its defence, **Con-Quest** is big and some people don't seem to ever get tired of this sort of game. A few brownie points too for an icon system which is at least faintly original.

At £2.99 you won't find **Con-Quest** a hair-pulling waste of money but unless you are an absolute addict of this genre I think you'll probably wish you hadn't bothered ■

FACTS BOX

A tired varient of Atic Atac graphics, themes and playing style that should long ago have been laid to rest

CON-QUEST
Label: Mastertronic
Author: Derek Brewster
Price: £2.99
Memory: 48/128K
Joystick: various

Reviewer: Graham Taylor

★★☆☆☆

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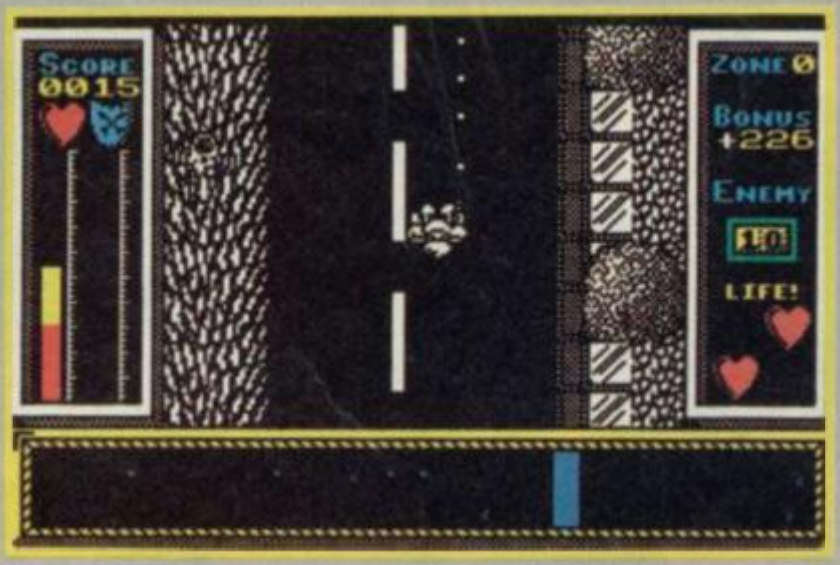
ARCADE REVIEW

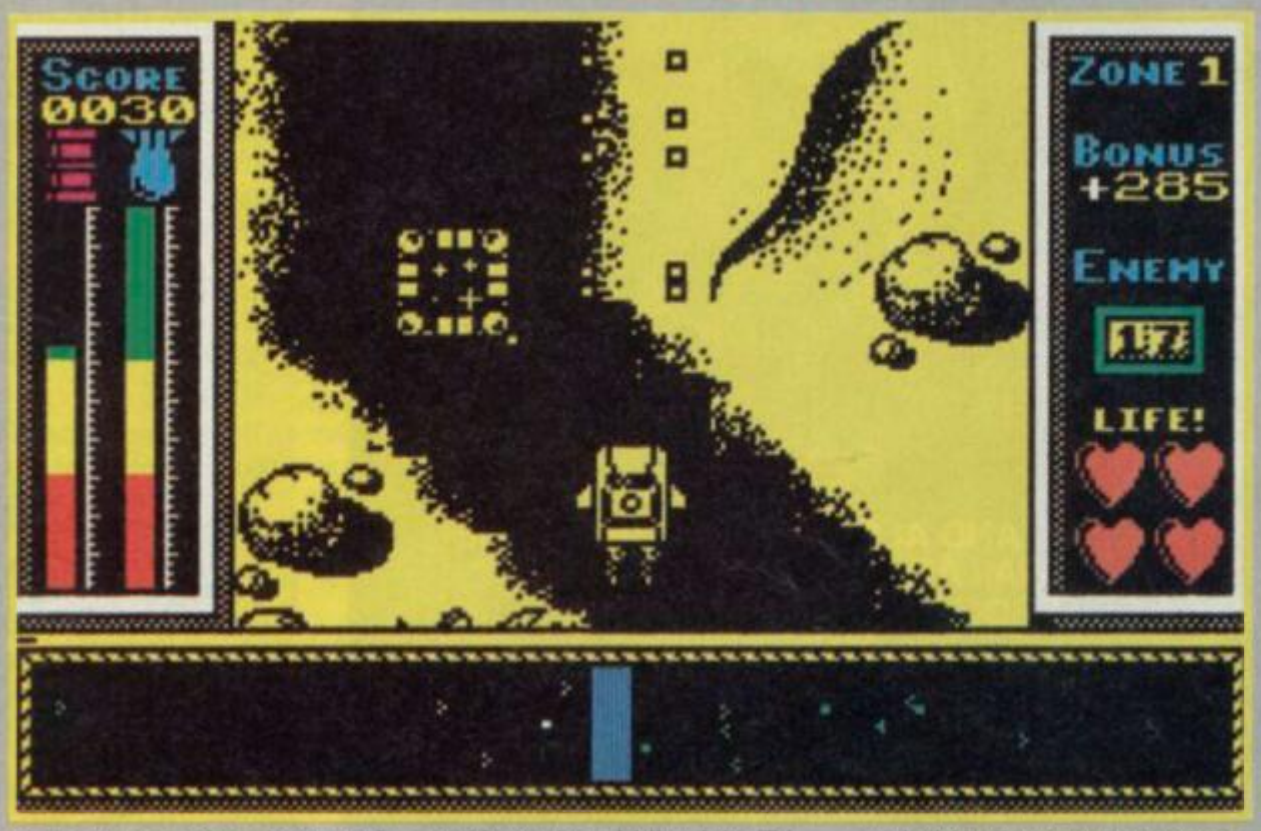
STAINLESS STEEL



In the midst of multi-player zillion screen, ultra sophisticated, brain testing megaprograms it can be a relief to find a program like **Stainless Steel**, which for all its clever presentation and hard edged sprites really only requires you to blast and blast and blast and keep out of the way.

There isn't too much to say about subtleties of gameplay or tactics in **Stainless Steel**. If you can keep firing and kill enough baddies in a short enough time — you'll survive. Until the next screen. You are Ricky Steel a teenage superhero burning up the desert in Nightwind, a combat vehicle which looks like a Maserati and drives like a dream. Your teenage task — to blast assorted android troops and win the day against Dr Vardos. He represents forces of darkness and general nastiness.

There are four zones and in each you must clear the way of enemy troops and battle your way up a screen which scrolls up/down the middle of the TV. Your movement is also indicated on a long range scanner which runs right/left across the bottom of the screen. This gives information on enemy presence and also gives you an idea, through their movement patterns, of what kinds of troops to expect.



The task is slightly different in each zone. In the first you simply have to reach your battle Maserati. Later zones have you driving at speed and flying. Worry not though, in all of them you get to blast almost everything into tiny pieces. Of course they will certainly reciprocate.

Aside from steering and blasting, there is a time limit on each zone and fuel levels to watch — you need to collect the occasional floating fuel pods which come hovering by.

The game is astoundingly difficult. It took me ages to master. Time and time again android helicopters hammered me to bits, despite enthusiastic use of my defensive shields. Take that as a recommendation if you're some sort of Mr Cool of the consuls. If you are an ordinary games gonzo you may get very irritated indeed, but that's a few steps away from addicted I guess ■

FACTS BOX

Good shoot 'em up. Not a major release but nicely presented and challenging to play

☆	STAINLESS STEEL
	Label: Mikro Gen
★	Author: David Perry
★	Price: £7.95
★	Memory: 48/128K
★	Joystick: various
★	Reviewer: Gra... Tay...

GRAPHICS AND SOUND

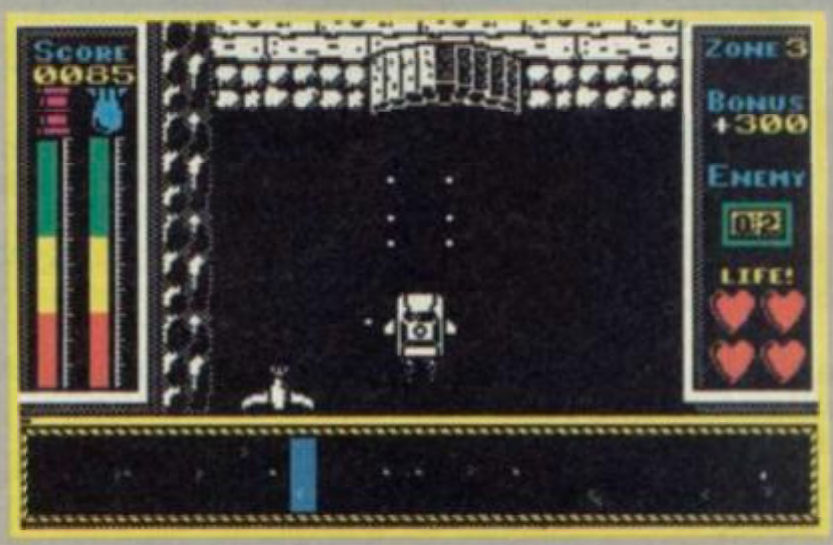
Nothing astounding, but *nice, big, smooth graphics* on relatively unchanging but detailed backgrounds. The classic arcade look if you like. Some bonus points for really good 'exploding to bits' sequences which burst out across the entire screen.

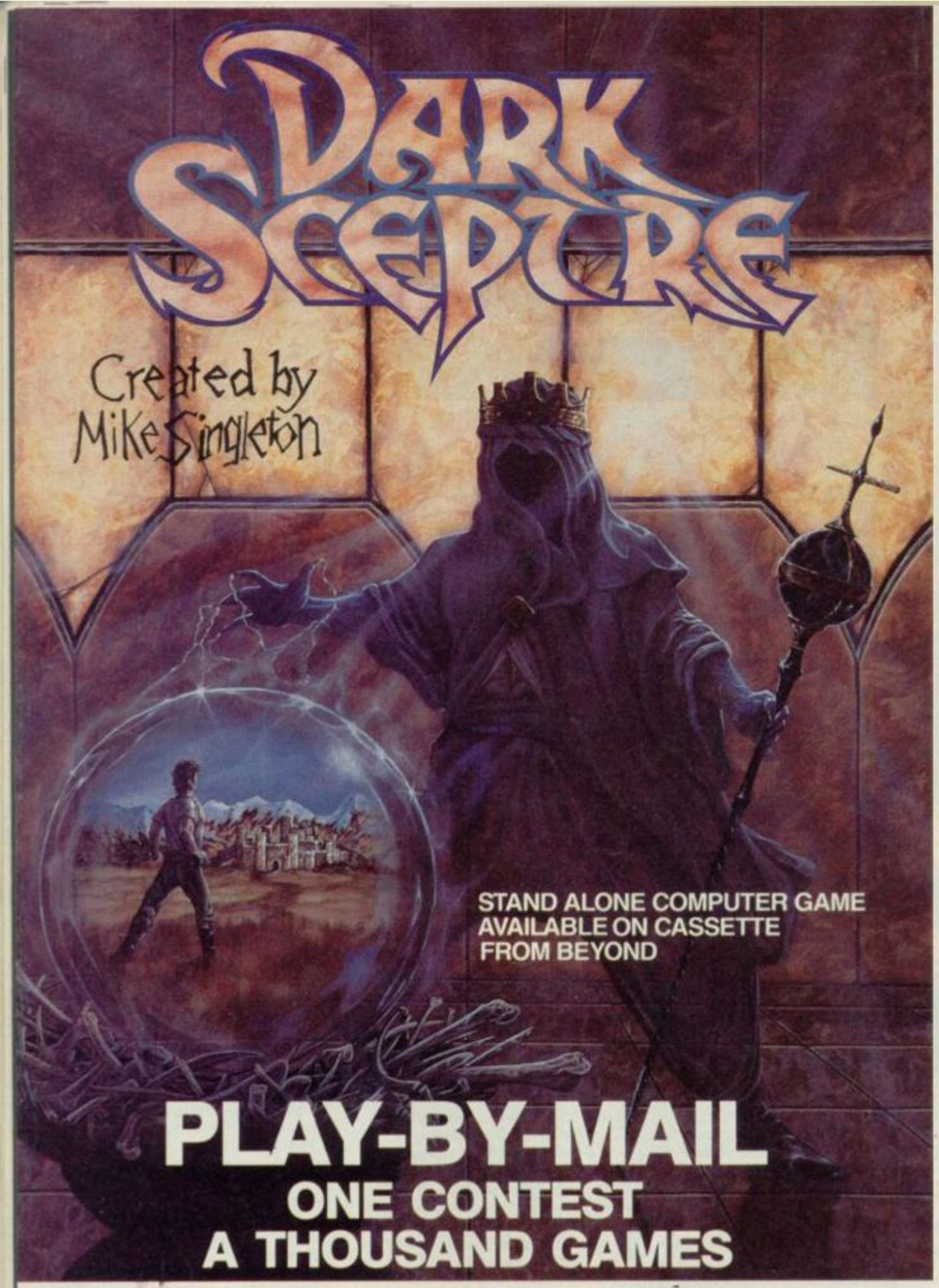
In the last sections things get a little more complex as you hunt for Dr Vardos himself — there is more variety to the graphics.

Sound is very good and aside from the usual bleeps and blurps there is an extraordinary exploding effect in which you sound almost as if you are screaming. It might be a sampled voice, in any event it is pretty gruesome.

TIPS ON PLAY

- Use the long range scanner carefully. It is the only effective warning of enemy forces you have
- Remember the prime objective is to destroy all the forces in each zone, not rush to the other side
- Take advantage of the occasional 'lay bys' where you can move well over to one side of the screen and blast at enemy forces more effectively
- Leave narrow sections of roadway as soon as possible — it is difficult to dodge enemy forces whilst stuck in them
- Watch fuel levels. Not only must you not run out but you must decide exactly when to replenish — use up all the fuel too early and you may not have enough left to mop up the enemy





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GORDO'S HELPLINE

The program this month about which everyone seems to be writing is:

Heavy on the Magick

The wizards over at Gargoyle have brought adventuring to a new height of excellence with their saga of the wanderings of Axil the Able. From the crop of letters coming in it seems that many of you questers have joined the aspiring warlock in the depths of Collodon's Pile. Susan Kay of Driffield and Mark Ives of London both write to ask how to enter Wolfdorp. The comprehensive advice given by Anthony Stowe should answer this and many other questions:

"First pick up the Grimoire — this is the book on the right side of the table in the start screen. Beware — the other book is deadly. The Grimoire gives you three spells, the most important being Blast. On your travels you'll find tables with keys. Match the signs in the key rooms with the signs besides doors to find the right key — simply put the key on the tables by the doors to open them.

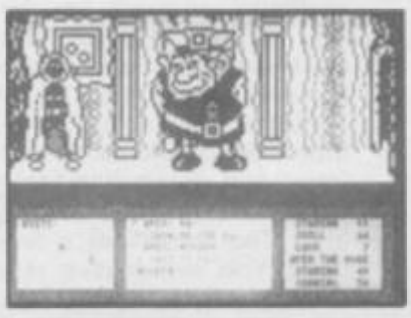
"Invoking demons is a very risky business. You first have to increase your grade. To do this travel to the Skull Door. Say 'Door, silence' and it will open. Your grade is now Zelator. With this grade you can invoke Belezbar and talk to him with some safety. Belezbar will tell you the true nature of an object. Astarot can take you to places you name as long as you have a talisman and know the place name of where you want to go.

"Magot will tell you the whereabouts of an object but Asmodee is best left alone until you are of a higher grade.

"If you find an impassable waterfall then say 'Water, fall'. Once past here you should find a Hydra which, with any luck, you can talk to and get a word or two out of. At Wolfdorp say 'wolf' to open the door — be careful here because the werewolf doesn't take kindly to any trespassers."

Most of you who've played this game will know that Apex can provide valuable information about many objects and problems. To call him or almost any other creature you'll need to find the *Call* spell. Douglas Glynn of Edinburgh tells you how:

"From the start screen go east, north three times into Trollwynd and then east again. Blast the troll in this room and then head south-east twice. The scroll you come across is the *Call* spell. If you find a door with a toll sign beside it — two circles inside the square — then put a bag of gold on the table. The gold is easily found by going east twice from the start screen." Ricky Dumbrell of Worthing offers some advice on the use of objects and on the troublesome business of invocation of demons:



"Having a magickal time here in Graumerphy's dungeons. Good old Apex the Ogre has passed on a few hints to me. The use of objects is vital. To overcome the Medusa in the Pit you should use the mirror, which is also found in the pit. Use a salamander clasp — found in Trollwynd — to get past the fire in the Sothic Complex but don't pick up the jar in the chest beside the flames. It is hemlock, alas.

"A sword, found north-west of the door to Wolfdorp, can be used to invoke Astarot safely. Remember to drop the sword first and then *Invoke*. Astarot will transport you round the dungeon. Use the mantle to *Invoke* Belezbar — I think you'll think this in the pit."

Enough Heaviness. On to

Sorderon's Shadow.

Addressing me as 'O Fat One' and wisely calling himself the Un-named One, a Norwegian adventurer from Molde provides some starting-up tips for **Sorderon's Shadow**.

"The Eternal Flame can be found at the first location. Take it and give it to Tigorath if you meet him — in return he will find the Harp of Solace. After taking the flame go north four times to a cave in Balomir. Take the urn that lies here and read its inscription. Then say 'Elin Balor' which will take you to the Hall of Balinor. Lonar will command you to kill a Krillan. Leave the house and seek out the Krillan that strikes around alone — you can't kill Krillans when they stick together in large hordes. When the Krillan is dead travel to the Tower of Supral and look for the Horseshoe of Sephyr. Once you've found it go to the Ring of Supral and wait for midnight. The Eye of Togar will now be revealed and you must return to the Hall of Balinor with it. Give the horseshoe to Tannor who will then take you to a place near the Home of Nolidor. Look for the prism here — with it you can go through the marshes and will also cause Hydral to appear if you need him."

If you know how to unseal the tomb in Guaval or know where the runes in the Cave of Triton are drop a line to The Un-named One at A. Lethsgt. 24,6400 Molde, Norway.

GORDO'S HELPLINE

Subsunk,

◆ the excellent and cheap adventure from Firebird, still draws its share of anguished correspondents. First this month is a letter of complaint from Sanjay Sen of Chesterfield: "In the summer of 1985 I bought **Subsunk** at the Chesterfield branch of Martins for £2.50 but at a recent visit to the shop I see it's now risen to £7.95.

The first thing to do in a situation like this is to ask the shop staff if they've made a mistake with the price tickets. If you're still told the game is selling at the high price politely point out the problem to the manager. If that doesn't work you should get in touch with Firebird themselves.

Now to problems — my thanks to Martin Coleman and a number of other persistent strugglers for complete solutions to the game. Richard Greenwood of the Wirral asks how he can get the aerial and the cable into the torpedo tube. After connecting the aerial, cable and transmitter, you must first 7, 1, 14 into the teleprinter. Now take the aerial to the torpedo room and 16 the tube with 10. Then 7, 1, 5 and fire it. You can then go to the telex room to finish.

D Kevlin, also from the Wirral, wants to know where the acid is that he's heard so much about. This ties in with his other question of how to open the hatch. The hatch is stuck down with rust and you will need strong acid to shift the encrustation. This can be obtained by going to the 8, 15. Once there, 6, 1, 8. By spilling out what it contains you should be able to loosen the hatch.

So far, little information has come my way on

Redhawk,

◆ the new game from Melbourne House, but Steven Hodson of Wednesfield has written in with some hints:

"Try arresting the mugger in the park and taking him to the police station. The policeman there will then give you a radio so you can find out what crimes are being committed and where. Go to the offices, read the sign and you'll get a job from the editor. Ask him for

a film — take photos with this to raise some money. If you get arrested it's a good idea to turn into another character — eg if you're Red Hawk and get arrested, turn into Kevin Oliver to go free."

Steven also claims to have finished **Terrormolinos**. If you need help write to him at 81, Silverton Way, Wednesfield Wolverhampton WV11 3LA — prepaid of course.

Battling with the Dark Lord himself or still stuck in the first location? Gordo Greatbelly can help. If you have problems, solutions, maps or anything interesting send a scroll to Gordo adventures you are playing sened a scroll to Gordo Greatbelly, Adventure Helpline, Sinclair User, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU

Information Exchange

● Two dedicated female adventurers have begun a new adventure fanzine called **Adventure Probe**. They'll feature hints and tips, serialised solutions and penpal contacts. Write for details to Pat Winstanley and Sandra Sharkey at **Adventure Probe**, 13 Hollington Way, Wigan, WN3 6LS

● Richard Johnston of 3, Ballyhannon Heights, Portadown, Co Armagh BT63 5PS will provide solutions to **Tir Na Nog, Dun Darach, Marsport** and **Lord of the Rings**. He asks for £1 per solution with an SAE as well. If you send money, remember you do so at your own risk

● Dales Pearce, 276 Harrogate Road, Leeds will provide solutions to **The Hobbit, Urban Upstart, The Inferno** and Artic's first four adventures. He'd like 50p to cover postage and photocopying

Quick Tips

● A Cunningham of Tunbridge Wells has got a shell, bottle piece of steel, vine and map in **Mindshadow** but can't go further. Try looking in the rubble in the cave — a stone will provide the means to light a fire to call help

● A R Millward of Stockport can't catch the taxi in **Terrormolinos**, despite having collected everything he can find in the house and gathering the family together in time. Taxi drivers don't like stepladders in their cars — try dropping them

● Paul Smith keeps being killed by the C5-riding Nazal in **Bored of the Rings**. The rifle from Morona will destroy C5 plastic and rid you of the problem

● In the same game, John Huett of Plaistow wants to know how to get Spam, Pimply and Murky to join Fordo. Don't worry, they do this automatically and will trail around after you for the entire game

Sorcerer of Claymorgue Castle,

◆ an epic of wizardry from Adventure International, has been around a while now. If anything, its popularity is growing, as the scrollbags for the past few months have had a fair number of requests for help. This month is no exception. Alex Piggott berates me for giving advice in previous issues about the towel: "What were you talking about? You say to ring out the soggy towel — well, where is it? I can't find it!" This ties in with another letter from Hamilton, the Midlands Phynoddderee from Stone in Staffordshire (Antiquarian's Note: The Phynodderee is a Manx hobgoblin combining the properties of the Scandinavian troll and the Irish leprechaun). Says our Phyn: "Whilst the assistance rendered by you, o fount of all wisdom, may help the uninitiated traveller in his wandering around the castle itself, I am in trouble with the moat and have failed totally to reach its murky depths. What do I do?"

There are a number of problems associated with the moat. To enter the castle first *Go moat* then 9, 13. You can thus swim down, 6, 1, 3 — satisfied Alex? — swim down again, 17, 19 and go up. There is also a star at the bottom of the moat. To get this prize — one of the thirteen you need to collect to win the game — you must swim down until you are at the bottom. 4, 24 the bottom and then cast the 25, 11. This enchantment won't last for ever so make sure you take the shortest route from the bottom to the grotto.

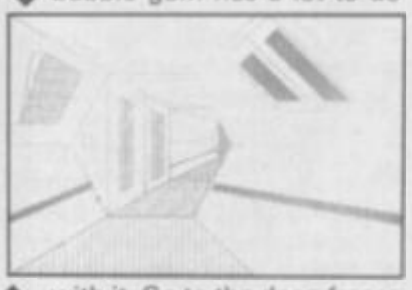
Paul Bradnock of Stechford has problems in the forest and clearly has some difficulty in moving around in it. The forest has a few uses. You can find a star there by casting a 12, 11 at a tree. 4, 24, 18 to find the star. It can also be used as a place to store stars — go into the forest when you have a fair number taking firefly, yoho and permeability spells with you, Cast two of these and you'll have a place to store stars. You can escape with the yoho spell.

Seabase Delta

◆ is the follow-up to **Subsunk** and already it's attracting its share of lost souls, one of whom is V Sathiyamoorthy of Wallington Surrey.

"How do you go up more than one level in Lift Number One — I'm sure it's to do with the bubble gum. And how do you go up at all in Lift Number Two? Please also tell me how to hook up the air bottle to the diving suit." For the answers I'm indebted to Robert Jones of Clifton Grove Nottingham.

First, Lift One. Yes, the bubble gum has a lot to do



with it. Go to the deep freeze compartment, get the gum and 20, 2. At Lift One you can then 23, 21 and use the lift as normal. Lift Two is more problematic than this and you'll need a large key to open the floor panel in it. To get this key you must find the pair of flippers and go to a fairly slippery spot. The diving suit can be made serviceable by getting the air bottle from the gas bottle store and 26, 1, 22 ■

Key to clues
1: THE 2: IT 3: TOWEL 4: LOOK 5: AERIAL 6: TAKE 7: INSERT 8: BATTERY 9: HOLD 10: BUTTER 11: SPELL 12: FIRE 13: BREATH 14: TAPE 15: COMPARTMENT 16: SPREAD 17: SWIM 18: ASHES 19: EAST 20: CHEW 21: BUTTON 22: HOSE 23: STICK 24: AT 25: BLISS 26: ATTACHING

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HUNCHBACK THE ADVENTURE

It's not much fun, being a hunchback in medieval Paris. Especially when dastardly Cardinals keep on kidnapping your girlfriend.

Hunchback — The Adventure is the third game from Ocean to feature the exploits of Quasimodo. If you managed to jump, duck and weave enough in the last two arcade efforts, you might be forgiven for thinking that rescuing Esmeralda was going to be simply a matter of joystick control and superb timing.

You'd be wrong. This is a proper text and graphics adventure.

It isn't small either. Over 100K of code and data. That massive programming feat is divided into three separate parts, each of which needs a *Load* to itself.

Part 1 finds you, as Quasimodo, desparately lurching your way through the gothic surroundings of the

cathedral of Notre Dame, trying to avoid the guards the Cardinal has out hunting for you.

Part 2, which you can't get to until you've finished Part 1, involves a little trip through the underworld — under Paris — to the Cardinal's mansion. And in Part 3 you have to beat the Cardinal, rescue Esmeralda, and escape.

As I have yet to finish Part 1, I can't give you any first hand information on what the other two parts entail, but I'll tell you what I *have* managed to do.

The top third or so of the screen is a graphics window which shows you, at first, a general view of the location you are presently in.

Superimposed on the right-hand side of the graphics window, you will see the various objects you are carrying.

The effect looks a bit like an advent calendar with only a few windows opened, and a rather odd choice of icons behind. There is space for up to six objects in this area of the graphics window. This is all you can carry.

On the left-hand side of the graphics, you get an event

window. When something interesting happens, like an evil guard attacks you, you get an appropriate picture. For example, if you get into a fight with a guard, you see a little strip cartoon fight, all flailing arms and legs, and suitable 'sound effect' words like Biff, Bop and Bite.

The graphics are unexpectedly effective and quite unusual to look at.

Below the graphics window, you have the text. Orders are of the by now familiar two-word verb/noun sort, or you can shorten to n, s, nw etc for movement.

On the whole the location descriptions are pretty good, and are supplemented by the graphics. There is also a considerable amount of humour.

The Spectrum's character set has been redesigned for the game, and is suitably Gothic. Unfortunately, while it looks great, it is sometimes very difficult to read.

So far I have mapped about 30 locations, although I've been to at least another half dozen. I've made my way from 'Chez Quasimodo', down through the belfry (taking in a side trip on the roof where I found a sharp object), wandered round the catwalks spanning the roof of the Cathedral, then down the main staircase to the high altar. I've rolled in the aisles, peeked in the choir stalls, visited two chapels and unearthed the Bishop in his library.

I've also killed innumerable guards — the first with the dagger I found on the roof, the rest with the short sword I took off the body. With a dagger you have to get in two good blows before guards drop, but with the sword you only need one. It can get a bit dull, squaring off against the fifth guard. While I've been wounded countless times (well, at least six) I don't seem to have fallen over yet.

I haven't been able to find that many problems yet — at least, none of the classic locked door, monster that won't let you pass, falling portcullis type. I can't help feeling that I must be missing something obvious. The thing that's really taxing my brain right at the moment is how to kill the Bishop — nothing seems to touch him!

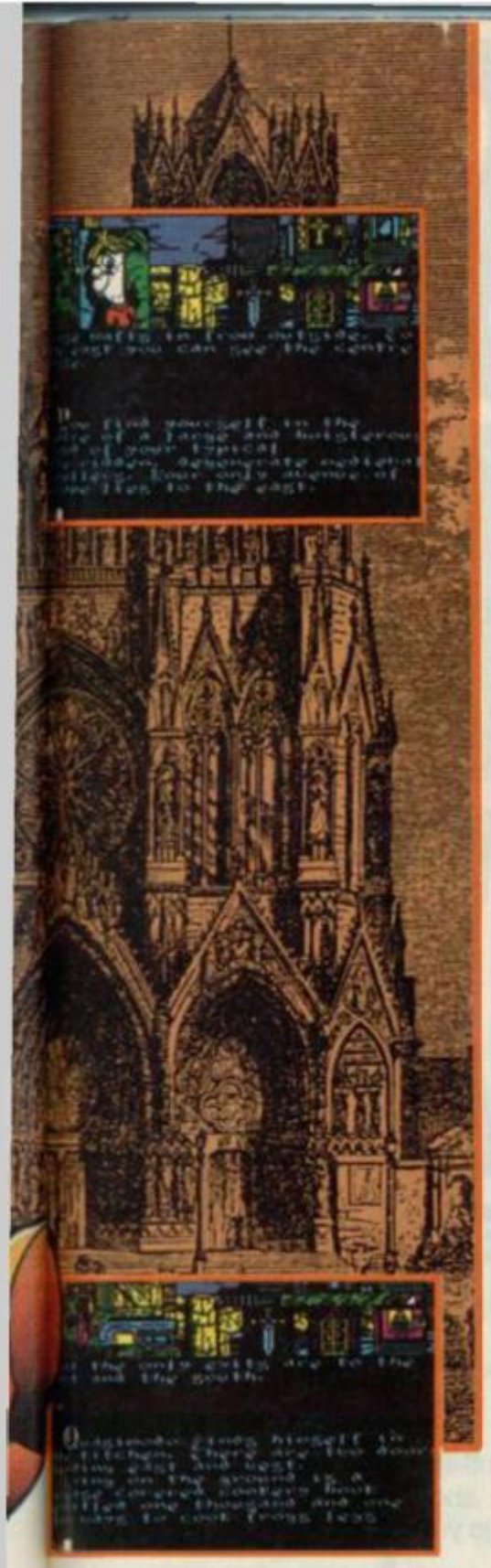
I've found enough books to stock a small library (and don't drop them around the Bishop —

The graphics are very unusual ● Though sometimes difficult to figure out ● The redefined character set give the program a strong gothic feel

Our cunning campanologist finds himself standing on a small parapet suspended above the centre aisle of the cathedral. There are walkways leading off in all directions.
Lying on the ground is a well thumbed instruction book entitled Zen and the art of guillotine maintenence
>get book

he'll put them on the shelves and you'll never find them again), including a bible, a book on bellringing for the deaf, a black magic treatise and a cook-book. None of them have proved to be any use to me, as every time I try to read them I'm told I'm not smart enough! I've also nicked a crucifix, a candle, a lantern and a net and I haven't been able to work out what the heck to do with them either.

The problem with **Hunchback — the Adventure** is that there doesn't seem to be enough to do. I suspect that I should be using the book on black magic to raise a demon, which at some point I'll probably have to get rid of using the old exorcism routine of bell, book and candle. I'm also pretty certain that the way out of Part 1 is via the crypt and into the catacombs, but I haven't been able to find any



MASTER OF MAGIC

ADVENTURE REVIEW

Mastertronic has produced some excellent games and **Master of Magic** could well turn out to be another winner.

It's an adventure, but one with a difference. Firstly, to set the scene: you, an unfortunate explorer of underground caverns, have negligently strayed too close to a 'deep black pool'. A hand has dragged you under the water, and you have found yourself trapped in a land of mystery by Thelric, the Master of Magic. Only he can return you to your world, and before he does you must find the lost Amulet of Immortality for him.

Once loaded and past the introductory pages, the screen is divided into four areas. The top half contains two windows: on the right is a scroll, which is used for descriptions of events — usually fights. On the left, you have a very small map of the immediate area you are in. This is a floor plan showing you what you can see — quite literally. You get a torchlight line-of-sight effect, which means that, standing by a door you can see down a corridor and part of a room; move into the room and you can see more, but you may not be able to see the corridor any more.

You, by the way, are represented by a white pixel on the purple map background. Monsters are also represented in white, but usually you can tell which is which by the shape of the character — a bat is vaguely bat-shaped, etc.

You control your movement either by joystick or by keyboard, and your little white pixel reacts accordingly.

Below the map and the scroll is another window, about four or five lines deep. When you want to do something other than movement — cast spells, pick something up, attack something etc — you call up a menu of options and cycle through them. Below that window is yet another — the final window: this time a sort of diplay which give you 'close ups' of whatever else is in your immediate vicinity — skeletons, hellhounds, bats, vampires, etc.

How about the game itself? I have to admit I was pleasantly surprised. It's really quite fine. It is very easy to get involved in the adventure and you tend to forget that you're actually controlling the destiny of a little white pixel and not some brawny Conan-type adventurer.

Pretty soon, you're really into hacking down evil bats and slaughtering slavering hellhounds. OK, so maybe it's not so much fun having the life drained out of you by the vampire, but I'm sure I'll work out how to get the better of it at some point.

And, so far, I've no complaints about programming, either. My only slight discontent is the map — I'd have liked it to have been bigger.

In some ways, **Master of Magic** reminds me very strongly of a program I saw about 18 months ago — I can't remember the name of it, but it involved a very similar use of line-of-sight on a map much like the one in this game, except that a lot of the action took place outdoors.

Master of Magic, however, is a far better game ■

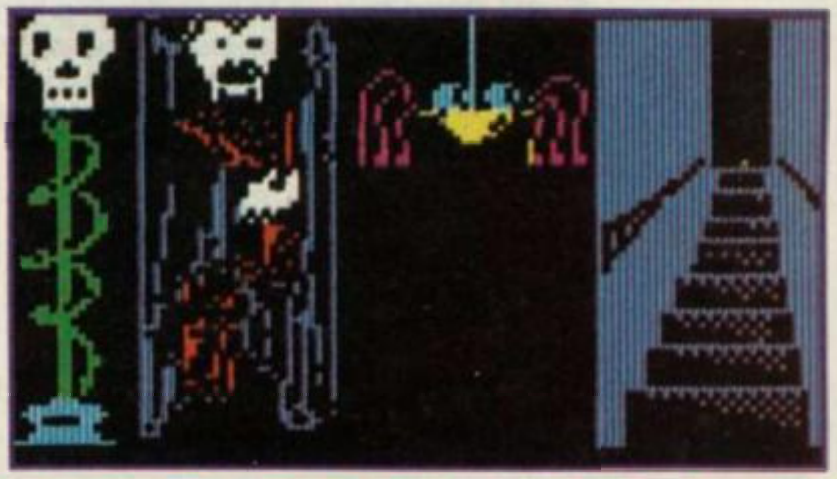
FACTS BOX

Another budget winner from Mastertronic. The adventure is quick, clean, and pretty challenging

MASTER OF MAGIC
Label: MAD
Price: £2.99
Memory: 48K/128K

Reviewer: Gary Rook

★★★★☆



steps down yet.

One difficulty with the game, incidentally, is that it doesn't always tell you about all the exists available from a location. In the library, for example, you aren't told any exits yet you can go north and east. Nor is this the only time this happens. If it's deliberate, then it's laziness — a good adventure writer creates problems according to the rules, not by cheating on what he tells the player.

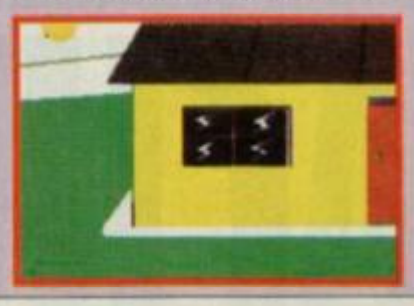
What I have seen is a fairly decent introductory adventure, and I'm sure that those people who buy it on the strength of the first two **Hunchback** arcade games, and who haven't played adventure games before, will enjoy it.

For the hardened adventurer, the other two parts are going to have to be a lot better. Not that I didn't enjoy it — the graphics, with their comicbook feel, hold your interest and there's plenty to explore ■

JOURNEY TO THE CENTRE OF EDDIE SMITH'S HEAD

Journey to the Centre of Eddie Smith's Head is the first adventure I've seen from Players, Interceptor's budget label. I'm sorry to say that future releases are going to have to be rather better than this.

The plot of **Eddie Smith** is fairly simple. To cut a short story even shorter, Eddie Smith, nuclear scientist, has gone bonkers after hitting his head on an atomic bomb big enough to destroy planet Earth and now intends to use it to do just that.



You have to search the laboratories and city where Eddie worked to find a way to defuse the bomb and save humanity.

Standard verb/noun input, usual format descriptions, usual style locations, some old objects and graphics.

The program is not particularly clever either when it comes to interpreting commands. True to some

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extent of just about every adventure, but this one seems to be more obtuse than is really necessary. For example, right at the beginning of the game, if you do an inventory you'll find you have a 50p piece and a 10p piece, in addition to a magic ring. When you managed to reach the toilets, you'll find a locked stall. "Ah ha!," you cry, "I must spend a penny!" — or rather 10 pee, because that's all the program will accept: neither 10p nor 10 pence will do, it has to be pee. Funny joke.

Again, when you've found the gun which is hidden in the toilet, you don't seem to be able to actually shoot anyone with it. Eddie, who turns up right at the beginning of the adventure, just stands there and lets you try. Obviously, he knows more than you do, and the program won't let you. It was only later that I thought of typing in *Pull Trigger* but by that time I'd lost the gun and any inclination to go back and find it.

FACTS BOX

A derivative and dull adventure. Knock it on the head, Eddie — even as a budget release

JOURNEY TO THE CENTRE OF EDDIE SMITH'S HEAD
Label: Players
Price: £2.99
Memory: 48K/128K

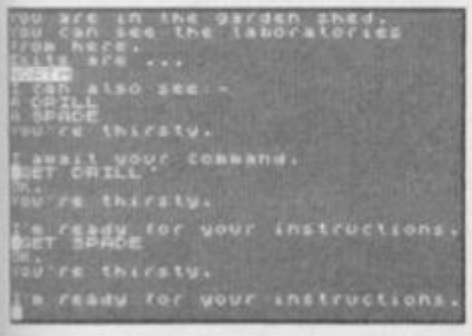
Reviewer: Gary Rook

★★☆☆☆

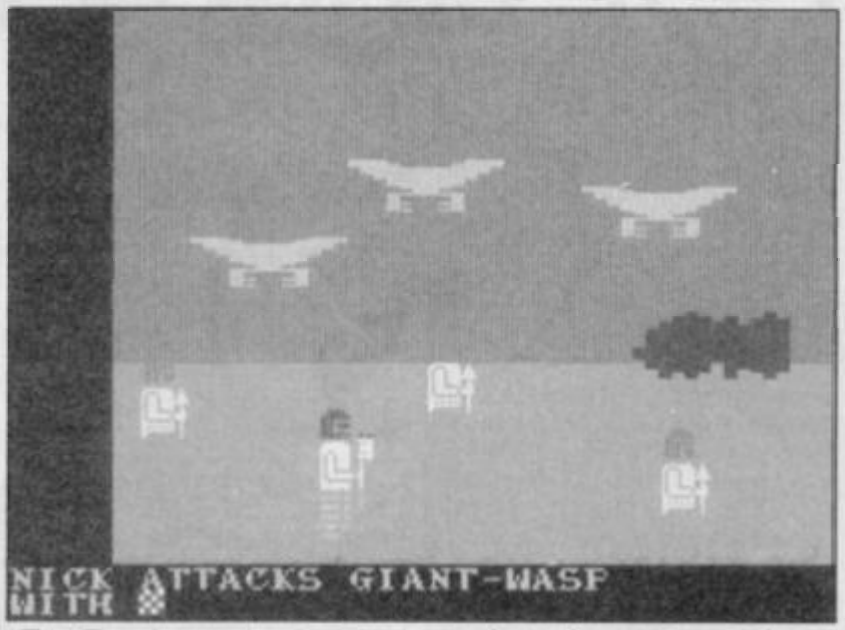
Eddie, by the way, seems singularly innocuous. He'll let you search his laboratory without any complaints. The little old man past the coffee machine is another matter entirely — just try and touch his invention and he'll tear you apart, necessitating a restart.

By the way, the coffee may be the answer to a rather nagging little problem you will face — thirst.

That's basically it. Unoriginal, unexciting and not very challenging. At £2.99 it's OK if you're an adventure buff with a rainy day to fill and nothing else in the cupboard, and it might make a reasonable first adventure, but there are far better budget adventures around ■



MANDRAGORE



Mandragore is a French game, which has necessitated translation of a rather different sort than is usual in computer programs. Unfortunately, it might have been better had it been left in the obscurity of a foreign language.

It's not that the game is bad, it's just that it's dull and old fashioned — it may well be a couple of years old, for all I know. **Mandragore** is a computerised role-playing game in which you control the destiny of a party of four adventurers.

First choose your team. For each character you are given 80 points to divide between Constitution, Strength, Intelligence, Wisdom, Dexterity and Appearance. Anyone who has played **Dungeons and Dragons** may recognise something here.

Then you choose race: dwarf, elf, mi-orc, hobbit and human. As far as I can see, what race you choose has little effect on the game.

Next you have to decide on an occupation for each of the four characters you are creating. Options are warrior, ranger, wizard, cleric, thief and minstrel.

Finally you have to decide on sex (an easy choice — male or female) and name. Sex is important because in certain situations you get pictures of your characters: female ones have bulges and head scarves — even the dwarves.

If you don't want to go through the rigmarole of creating new characters the first time you play, you can use a preset team, led by a female human called Syrella. There is also a short story accompanying the game detailing Syrella's attempts to recruit some adventurers to help her find her father's lost temple with the magic flame located on a volcano . . .

Once you have your team, you enter the land of Mandragore. There are two modes to the game: one when you are journeying around the countryside, the other when you enter villages or chateaux. In map mode, you move square by square: terrain features include plains, forests, hills, swamps, sea and mountains. You move about by typing in the direction you wish to travel: n,s,e,w. Every so often, you get a random encounter with some sort of monster. You can run away, but there are penalties; otherwise, you have to fight.

On meeting a monster, you get a really rather dreadful graphics sequence which depicts the members of your party (head scarves and all) and the monsters as a series of blocks. If one of your party attacks the enemy, the appropriate graphic zips across the screen and then back again. All very terrible. What's more, if one of your people has part of his/her body the same colour as the background, they both disappear.

If you land on a square containing a village or a chateau symbol, you can enter it. In village or chateau mode you have the awful graphics all the time. Instead of moving square by square, you change screens, each one being a room or corridor. While the village information is contained in the main program, if you want to enter a chateau — there are 10 — you have to find the right place on the chateaux tape and load it in. Very tedious.

When in villages or chateaux there are a wide variety of instructions you can give your characters. To give you a very quick idea of the way it works: hit *1-4* to choose a character who is going to do something; type in two letters for a particular action; type *a,b,c* or *d* to choose an object or monster you want to do something to. So *1 a* at *a* will be translated by the program as "Syrella attacks the wyvern". In that case it will then add "with:" you hit *1* to *4* again to choose one of the four objects Syrella is carrying.

While the list of possible actions is comprehensive, the whole business is very repetitive and I really couldn't be that bothered. It's also very difficult to actually get anywhere at the start if you create your own team. Each of your characters has 50 gold pieces, for a total of 200 gold and that's hardly enough to buy one little dagger. A bow costs 220 pieces! Maybe your're meant to bargain. I tried stealing everything — it worked fine with the thief in the pregenerated team who was able to nick everything in sight that wasn't nailed down, but when I tried with the thief I'd created he was instantly caught and fined all his money.

If you can't get hold of any weapons you're going to be in deep trouble in the wilderness, as you'll have to use your bare hands or magic. You can kill things by punching them, but it takes an awful long time and your characters are going to get hurt in the process. Magic works well, but after a certain number of magical attacks, your magician blows out, rather like a light bulb, and is dead.

Death is not a pleasant thing: it basically means you are without that character, and as far as I can work out from the game and the instructions, you cannot recruit new characters to fill the gap.

I can't see this being any sort of success, it's just too old-fashioned. It's also too slow. I certainly can't get excited over spending ages killing something that looks like an evil jellyfish but which the program assures me is an owlbear ■

FACTS BOX

Don't bother. Computer role-playing games need speed to work well — Mandragore is just a drag

MANDRAGORE
Label: Infogram
Author: In house
Price: £9.95
Memory: 48K/128K

Reviewer: Gary Rook

★☆☆☆☆

WORK-OUT REVIEW

ESPERANTO

Esperanto, if you don't know already, is a language. Not a computer language but a spoken one — intended to replace English as the world's tongue.

If the idea of learning it interests you Lez Peranto has brought out a micro training course to teach it.

It comes as three tapes — **Espotext, Espogram,** and **Espoword** — ten worksheets and an audio tape. A complete course in Esperanto.

Together with the worksheets, **Expotext** forms the main teaching unit on the structures and vocabulary of the language. The presentation is reminiscent of some of the early educational programs.

Espogram is designed to give practice at the grammer of Esperanto. One of fifty short sentences is displayed with two bits missing. The object is to insert the missing bit by selecting it from the twenty possibilities at the top of the page. A short explanation of the answer is given on screen. Unfortunately the first answer is wiped from view far too quickly, especially if a mistake is made.

Three ways of testing vocabulary are provided by **Espoword**. They are multiple choice tests of English/Esperanto and Esperanto/English by selecting one word from nine to translate the given word. The third test offers two list words and the one matching word has to be picked from both lists.

Both **Epsogram** and **Espoword** can be used simply to show the correct answer to the problems but are best used as tests.

Not a terrifically well programmed program but very interesting for all that.

If you want to know more about Esperanto this package must surely be the only way your Spectrum can be of help ■

FACTS BOX

Not terrific but certainly the only way to use your micro to explore this curious linguistic blind alley

ESPERANTO
Label: Lez Peranto
74 Devonshire Way, Shirely, Croydon
Memory: 48/128K

Reviewer: Rob Wright

★★★☆☆

OLIVER'S MUSIC BOX

When reviewing any music product for the Spectrum, no matter how clever it is, it's always difficult to resist the feeling that the whole business is a pretty pointless exercise.

Pointless anyway if you are seriously interested in music. One monophonic line of melody, one completely characterless *Beep* sound — what less could you ask for?

Oliver's Music Box allows you to enter musical notes from the Qwerty keyboard, see them displayed in a fair copy of conventional music notation, and play the music back in different keys and pitches.

Music Box has some nice features. The main thing is it looks good. It has probably the most accurate visual representation of sheet music I've seen in a Spectrum music program. The crotchets, quavers and minims, along with sharp, flat and other annotations, look right — maybe you could even print this stuff out and play it. There are problems, however.

Music Box falls down in its editing facilities. The first irritation is in entering the music — you must select not only note duration, key and sign but also octave. This can take quite a while and reinforces my belief that relying on pure keyboard entry (rather than say, some sort of joystick controlled on-screen system where you 'place' notes on the screen leger lines) is a mistake.

If the above is (maybe) a matter of taste, the correcting, deleting and inserting facilities surely are not. In order to delete a note you have to hear all the notes from the beginning, deleting a whole bar of notes therefore involves hearing the tune from the beginning to that point for every note in the bar.

The best that can be said of **Oliver's Music Box** is that it works, is slicker than the majority of similar offerings and has as wide a range of features as you need worry about given the hardware capabilities.

I should add, however, that the general fiddlyness of actually using the package might put you off completely.

A 128 version is expected and that could well be a different ballgame entirely ■

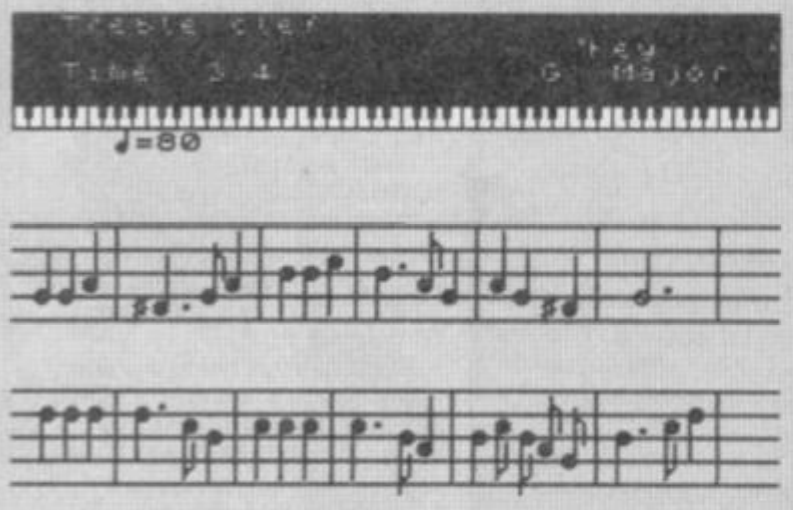
FACTS BOX

Looks good with some sophisticated features. Spoilt by over-fussy input and correction procedures

OLIVER'S MUSIC BOX
Label: Cosmic Pop
Author: Malcolm Shykles
Price: £5.95
Memory: 48/128K

Reviewer: Graham Taylor

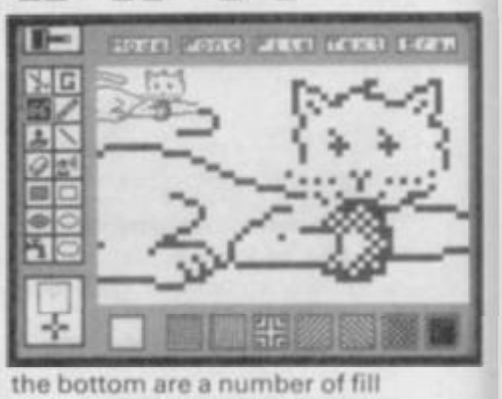
★★★☆☆



LORIGRAPH

Lorigraph is a curiosity. A graphics package which has many of the features of **Art Studio** but no colour. It sounds absurd, but it isn't.

Where **Art Studio** was a general package, **Lorigraph** is specifically concerned with technical designs and geometric shapes. Whilst there are various types of shading effect available, there is no colour option. Joystick and icons control the program. On the left-hand side of the screen are a series of boxes representing the main options for drawing style — pen, airbrush or shape based. Along the bottom are a number of fill designs, and along the top are more general functions.



There are a variety of pen options giving various forms of thin, thick and intermittent lines or a spray can option for more general effects.

More sophisticated features include magnify and the usual cut and paste options. More unusual are some set geometric shapes which **Lorigraph** handles in an unusual way. They are treated as though they are objects in 3D space and, by setting the drawing point and moving the joystick, you can 'spin' them around an imaginary middle axis, thus it is easy to draw an ellipse 'edge on'.

Art Studio is more powerful but **Lorigraph** is well designed, easy to use and for those whose graphics tasks tend to be more technical than artistic, it could be the right choice.

FACTS BOX

Unusual graphics program with many good points. Best for technical rather than artistic work

LORIGRAPH
Label: Loriciels
Author: Dr R Arrandmado
Memory: 48/128K
Joystick: Various

Reviewer: Graham Taylor

★★★★☆

BASICALLY SPEAKING

Are you the well-read, technical type with an O-level in Maths and not overawed by computers? If you are you will probably not be interested in **Basically Speaking**, a new elementary course in Basic programming from Computer Publications.

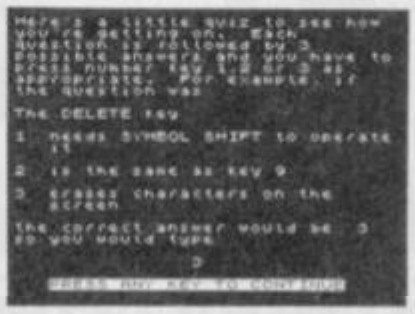
The course is both cassette and book, the cassette containing 13 programs. The first of these includes some machine code and is intended to show off the Spectrum's capabilities. The others are written in Basic and are tied in with the exercises in the book.

Two different versions are available to cater for the differences between the Spectrum Plus and the original 16/48K version.

Each chapter introduces new concepts starting from getting familiar with the keyboard through to arrays and is designed to take about an hour to work through. The chapters are short and each ends with a summary highlighting the concepts introduced and a set of exercises to reinforce them.

The programs used are intended to be practical, checking bank balances, and the like and they are all kept as short as possible.

I particularly like the way the material is structured and avoids big leaps. One big leap commonly taken is the jump


Here's a little quiz to see how you're getting on. Each question is followed by 3 possible answers and you have to press number key 1,2 or 3 as appropriate. For example, if the question was
THE DELETE key
1 needs SYMBOL SHIFT to operate it
2 is the same as key 9
3 erases characters on the screen
the correct answer would be 3 so you would type
3
PRESS ANY KEY TO CONTINUE

from the *Print At* command to drawing graphics using *Plot* and *PDraw*. **Basically Speaking** avoids this problem by missing out these commands. Although *Ink* and *Paper* colours are explained they are left until the latter stages. Also missing is the use of the more advanced mathematical functions.

The book is written in what is intended as a lively lighthearted conversational style. There is a very fine line between achieving this and being condescending. Personally I found that it strayed too often into the latter.

The course gives a very good starting point for learning Basic programming. However it really is very basic, you may find you soon need to move on to a more advanced course ■

FACTS BOX

A very basic tutorial package. Well thought out and presented though

BASICALLY SPEAKING
Label: Computer Publication, 5 Western Drive, Shepperton, Middx
Price: £9.95

Reviewer: Mike Knight

★★★★☆

TOOL-KIT REVIEW

```
ORG     60000
LOAD    60000
LD      IX,(23563)
LD      E,(IX+4)
LD      D,(IX+12)
LD      C,(IX+20)
LD      B,(IX+28)
LD      A,(IX+36)
PUSH    AF
```

BUBBLE SORT

Bubble Sort is a simple menu-driven database which stores, and displays long lists of information.

File length depends upon the amount of free Ram but each record must be shorter than 26 characters. Each time you enter a snippet of information it is sorted and positioned in the file using an alpha-numeric bubble sort. If you make an error the program will delete an entry but you need to know the key number of that item.

Files can be listed on screen, dumped to a ZX or Alphacom printer, or stored on cassette. They can also be date stamped, so you know when they were last up-dated.

Bubble Sort is a simple but effective alternative to a shopping list. You cannot, however, create, record or display formats so its uses are limited ■

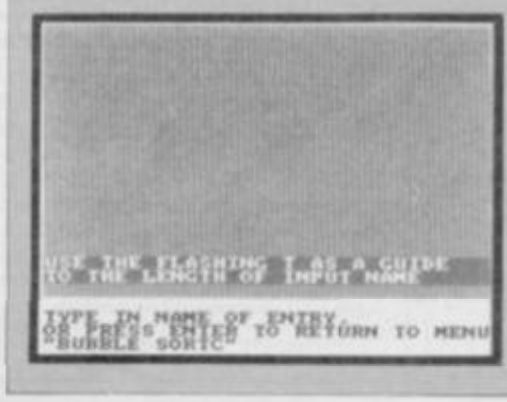
FACTS BOX

A dull but functional database. Record length is unnecessarily restricted. Very disappointing

BUBBLE SORT
Label: Keith Norton
8 Devonshire Close, Staveley, Chesterfield
Memory: 48K/128K
Price: £5.00

Reviewer: John Gilbert

★★☆☆☆


USE THE ENTERING KEY AS A GUIDE TO THE LENGTH OF INPUT NAME
TYPE IN NAME OF ENTRY OR PRESS ENTER TO RETURN TO MENU
BUBBLE SORT

ZX BIG SHOT

Do you still have one of those dinky ZX printers or, perhaps, a chunky Alpahcom 32? Do you wanna print posters using that shiny silver paper? I thought not, but Buttercraft has other ideas with **ZX Big Shot**, its Palaeolithic printer program.

Your poster is created in an on-screen window and the width and height can be varied by adjusting that window. To put a message on the screen press 'T' for the 'L' cursor and type in a maximum of 32 letters. Press 'P' to call the texture palette and select one of 26 patterns. Your input text will expand to fill the window which you can then move to position another message on screen.

You can fill windows with background textures, to complement text, or add to original textures by over printing one pattern onto another. Shadows can be added to the text to give it a 3D effect.

Superprint mode dumps your poster to paper. But first choose the text magnification by selecting one of six horizontal and vertical enlargement factors.

Once you've got a printout you can turn your creation into a poster using the instructions in Buttercraft's tacky cassette leaflet — the cover shot shows the miracles you can perform with the utility.

Separate the printout into strips, trim off the left edge of each strip and apply adhesive to the right edge. Then stick all your bits of paper to each other. Buttercraft recommends Scotch spraymount but I found sticky back plastic gave a finer finish.

ZX Big Shot is a waste of money, unless you intend to run large numbers of village fêtes, or own a small business and can't afford a typesetter. It does everything it is supposed to do, but that's not much. At such a high price Buttercraft should be ashamed of itself.

FACTS BOX

Limited-use print utility for those rare birds who have ZX Printers. Needs a dot matrix printer driver

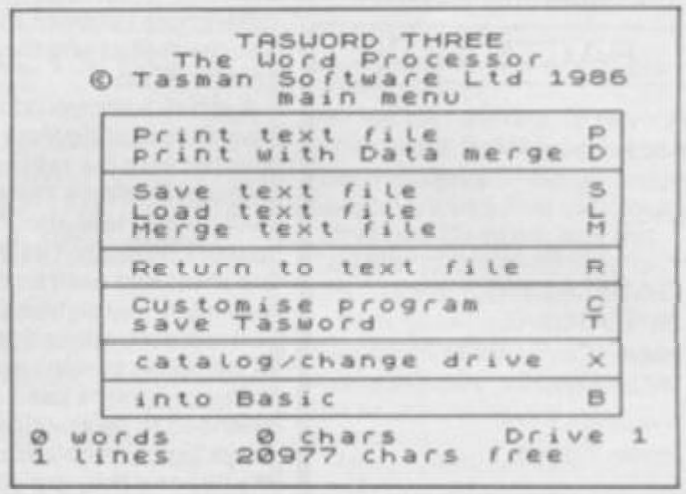
ZX Big Shot
Label: Buttercraft Software
Price: £5.99
Memory: 16K/48K

Reviewer: John Gilbert

★★☆☆☆

TASWOR

THE WORD PROCESSOR – A NEW STANDARD FOR THE



TASWORD TWO led the way in setting a standard for word processing on the ZX Spectrum. TASWORD THREE pioneers the new standard.

TASWORD THREE retains all the features which have made Tasword Two a household name for the Spectrum. With many additional features and enhancements, including a built-in mail merge and up to 128 characters per line, TASWORD THREE is the definitive word processor for the Spectrum and Spectrum+ with microdrive.

ZX SPECTRUM TASWORD TWO

THE WORD PROCESSOR

TASWORD TWO for the ZX 48K Spectrum cassette £13.90 microdrive cartridge £15.40

"Without doubt the best utility I have reviewed for the Spectrum"
HOME COMPUTING WEEKLY APRIL 1984
"If you have been looking for a word processor, then look no further" CRASH JUNE 1984
With 64 characters per line on the screen and a host of useful features TASWORD TWO is the ideal cassette based word processing package for the Spectrum owner.

TASPRINT

THE STYLE WRITER

TASPRINT for the ZX 48K Spectrum cassette £9.90 microdrive cartridge £11.40

A must for dot matrix printer owners! Print your program output and listings in a choice of five impressive print styles. TASPRINT utilises the graphics capabilities of dot matrix printers to form, with a double pass of the printhead, output in a range of five fonts varying from the futuristic Data-Run to the hand writing simulation of Palace Script. A TASPRINT gives your output originality and style! The TASPRINT fonts are shown to the right together with a list of compatible printers.

TASCOPY

THE SCREEN COPIER

TASCOPY for the ZX Spectrum with Interface 1 cassette £9.90 microdrive cartridge £11.40

The Spectrum TASCOPY is for use with the RS232 output on ZX Interface 1. It produces both monochrome (in a choice of two sizes) and large copies in which the different screen colours are printed as different shades. With TASCOPY you can keep a permanent and impressive record of your screen pictures and diagrams. A list of printers supported by TASCOPY is given to the left.

TAS-DIARY

THE ELECTRONIC DIARY

TAS-DIARY for the ZX 48K Spectrum and microdrives. Cassette £9.90

Keep an electronic day-to-day diary on microdrive! TAS-DIARY includes a clock, calendar, and a separate screen display for every day of the year. Invaluable for reminders, appointments, and for keeping a record of your day. The data for each month is stored as a separate microdrive file so that your data for a year is only constrained by the microdrive capacity. TAS-DIARY will work for this year, next year, and every year up to 2100! Supplied on cassette for automatic transfer to microdrive.

TASMAN PRINTER

INTERFACE

TASPRINT PRINTER INTERFACE for the ZX Spectrum £29.90
RS232 Cable for ZX Interface 1 £14.50

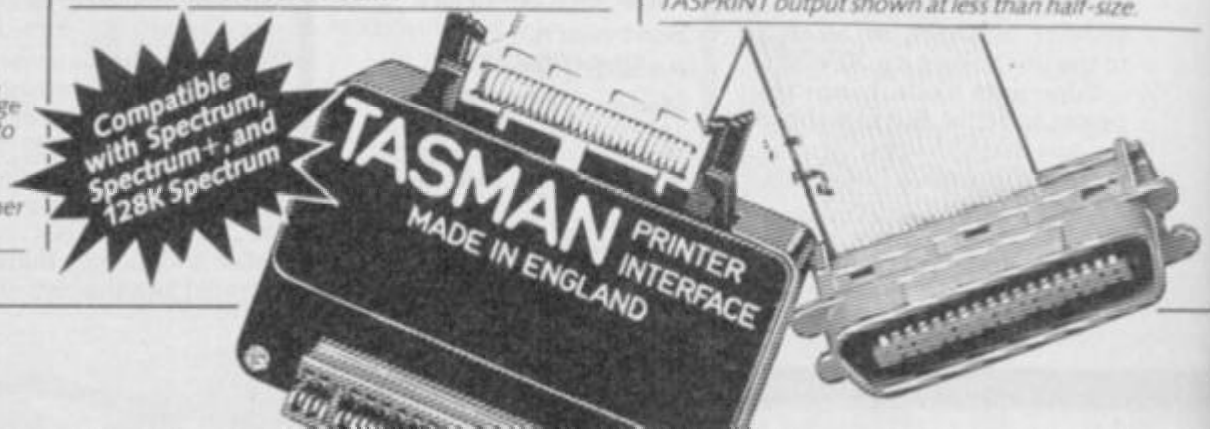
Plug into your Spectrum and drive any printer fitted with the Centronics standard parallel interface. Supplied complete with ribbon cable and driving software. The user changeable interface software makes it easy to send control codes to your printer using the method so successfully pioneered with TASWORD TWO. The cassette contains fast machine code high resolution full width SCREEN COPY SOFTWARE for Epson, Mannesmann Tally, Shinwa, Star, Tandy Colour Graphic (in colour!) printers. TASCOPY shaded screen copy software for this interface (value £9.90) is INCLUDED in this package.

The TASCOPIES and TASPRINTS drive all Epson compatible eight pin dot-matrix printers e.g.

AMSTRAD DMP 2000	NEC PC8023B-N	BROTHER M1009
EPSON FX-80	MANNESMANN TALLY MT-80	BROTHER HR5
EPSON RX-80	STAR DMP501/515/1610	SHINWA CP-80
EPSON MX-80 TYPE III	COSMOS-80	DATAC PANTHER
		DATAC PANTHER II

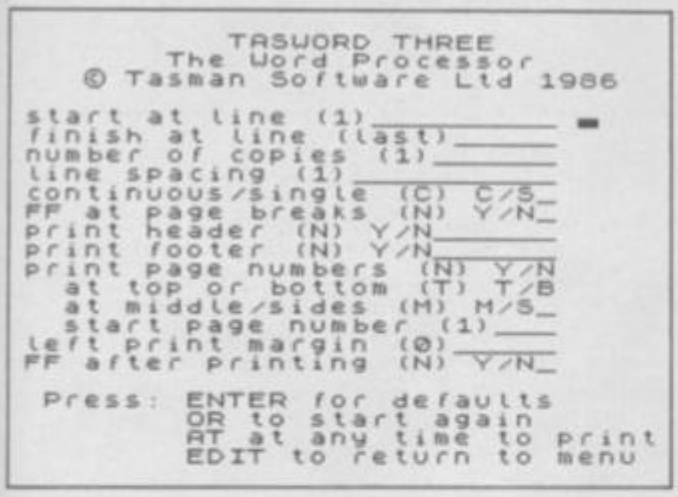
COMPACTA - bold and heavy, good for emphasis
DATA-RUN - A FUTURISTIC SCRIPT
LECTURN LIGHT - clean and pleasing to read
MEDIAN - a serious business-like script
PALACE SCRIPT - a distinctive flowing font

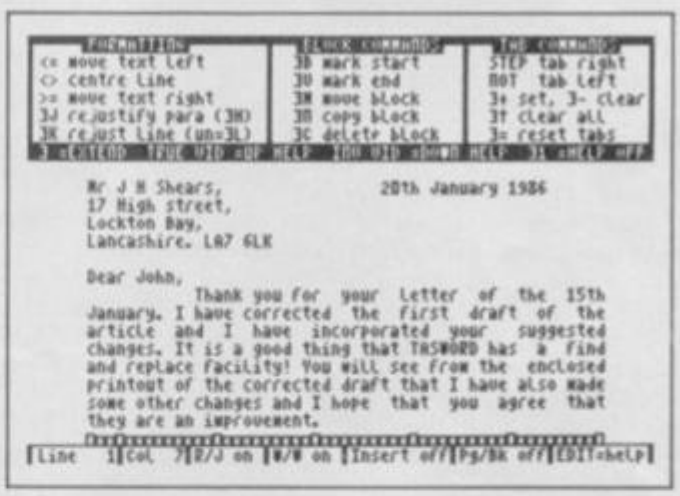
TASPRINT output shown at less than half-size.



D THREE

ZX SPECTRUM AND ZX SPECTRUM+ WITH MICRODRIVE


TASWORD THREE
The Word Processor
© Tasman Software Ltd 1986
start at line (1)
finish at line (last)
number of copies (1)
line spacing (1)
continuous/single (C) C/S
FF at page breaks (N) Y/N
print header (N) Y/N
print footer (N) Y/N
print page numbers (N) Y/N
at top or bottom (T) T/B
at middle/sides (M) M/S
start page number (1)
left print margin (0)
FF after printing (N) Y/N
Press: ENTER for defaults
OR to start again
AT at any time to print
EDIT to return to menu


FORMATTING
<= move text left
|= centre line
>= move text right
JJ rejustify para (JM)
JR rejust line (un=JL)
BLOCK COMMANDS
JB mark start
JU mark end
JM move block
JC copy block
JC delete block
TAB COMMANDS
STEP tab right
BOT tab left
J+ set, J- clear
JT clear all
J= reset tabs
Mr J H Shears,
17 High street,
Lockton Bay,
Lancashire. LA7 6LK
20th January 1986
Dear John,
Thank you for your letter of the 15th January. I have corrected the first draft of the article and I have incorporated your suggested changes. It is a good thing that TASWORD has a find and replace facility! You will see from the enclosed printout of the corrected draft that I have also made some other changes and I hope that you agree that they are an improvement.
Line 1 Col 7 R/J on W/W on Insert off Pg/Bk off EDIT=help

Please note that TASWORD THREE is only supplied on, and will only run on microdrive (Opus Discovery version now available – see below).

TASWORD THREE – THE WORD PROCESSOR – Microdrive £16.50

One of a famous family: TASWORD TWO (ZX Spectrum), TASWORD MSX (MSX Computers), TASWORD 464 (Amstrad), TASWORD 464-D (Amstrad), TASWORD 6128 (Amstrad), TASWORD EINSTEIN (Tatung Einstein), TASWORD 64 (Commodore 64)

Available from good software stockists and direct from Tasman Software, Springfield House, Hyde Terrace, Leeds LS2 9LN.
Tel: (0532) 438301

TASWIDE
THE SCREEN STRETCHER

TASWIDE for the ZX 48K Spectrum cassette £5.50

With this machine code utility you can write your own Basic programs that will, with normal PRINT statements, print onto the screen in the compact lettering used by TASWORD TWO. With TASWIDE you can double the information shown on the screen!

TASWORD THREE
FOR OPUS DISCOVERY

A special version of TASWORD THREE for the Opus Discovery disc drive. Disc £19.50

ZX SPECTRUM 128
TASWORD 128
THE WORD PROCESSOR

TASWORD 128 for the ZX Spectrum 128 cassette £19.95

TASWORD 128 has been especially developed to use the additional memory of the 128K Spectrum. This gives text files that are over 60K long – this is about ten thousand words! TASWORD 128 has all the features of TASWORD THREE (mail merge only when transferred to microdrive). TASWORD 128 is supplied on, and will run on, cassette. TASWORD 128 is also readily transferred to microdrive by following instructions supplied with the program.

SINCLAIR QL
QL is a trademark of Sinclair Research Ltd

TASCOPY QL
THE SCREEN COPIER

TASCOPY QL for the Sinclair QL microdrive cartridge £12.90

TASCOPY QL adds new commands to QL Superbasic. Execute these commands to print a shaded copy of the screen. Print the entire screen or just a specified window. TASCOPY QL also produces large "poster size" screen copies on more than one sheet of paper which can be cut and joined to make the poster.

TASPRINT QL
THE STYLE WRITER

TASPRINT QL for the Sinclair QL microdrive cartridge £19.95

TASPRINT QL includes a screen editor used to modify files created by other programs, such as QUILL, or by the user from Basic. These modified files include TASPRINT control characters and may be printed, using TASPRINT, in one or more of the unique TASPRINT fonts.

Available from good stockists and direct from:

Tasman SOFTWARE

Springfield House, Hyde Terrace, Leeds LS2 9LN. Tel: (0532) 438301

If you do not want to cut this magazine, simply write out your order and post to: TASMAN SOFTWARE, DEPT SU, SPRINGFIELD HOUSE, HYDE TERRACE, LEEDS LS2 9LN

I enclose a cheque/PO made payable to TASMAN Software Ltd OR charge my ACCESS/VISA number: _____

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NAME _____	_____	£ _____
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_____	*Outside Europe add £1.50 per item airmail.*	£ _____
Telephone Access/Visa orders: Leeds (0532) 438301		TOTAL £ _____

Please send me a FREE Tasman brochure describing your products for: Spectrum_____ QL_____ MSX_____ Amstrad_____ Commodore 64_____ Tatung Einstein_____ SU

Tasman. The following distributors of Tasman products may be contacted for the address of local suppliers. Many products are supplied in translated form. FINANCE & SWITZERLAND Semaphore Logiciels, CH 1283 La Plaine, Geneva. SCANDINAVIA Kelly data, Postboks 43, Refstad, Oslo. NETHERLANDS Abusoft, PO Box 1393, 9701 BJ Groningen. GERMANY Profisoft, Suttbauser Str 50-52, D-4500 Osnabruck. BELGIUM Eates Computing, Avenue Guillaume Lefeber 30, 1160 Brussels. PORTUGAL Informova, Campo Grande 28-4 A, 1700 Lisbon. AUSTRALIA Dolphin Computers, 99 Reserve Road, Artarmon, New South Wales 2064. NEW ZEALAND Software Supplies, PO Box 80, Christchurch. U.S.A. Ramex International, 1750 20 Mile Road, Washington MI 48094.

Friendly combination

Miracle Technology has extended its line of WS modems with the WS-4000, for the 48K Spectrum. It includes all the features of the 1000-3000 models, some advanced extras and the chance to up-grade its capabilities as your comms knowledge increases.

The set-up is simple. Plug the serial interface into the back of the WS-4000 and slot the other end on to the Spectrum edge connector. Load in the **Datas-pectrum** software and you're ready for action.

You don't need a telephone to dial your favourite database number, but you can attach one to the PSTN socket at the back of the modem to check the clarity of the line. The modem contains an autodial facility which is hardware based but software controlled. Type in the command AT followed by D (for dial) and the number of the

bulletin board you want to access. Press enter and the on-line pilot at the front of the modem will light up as the number is automatically dialled.

When the modem has finished dialling the Auto Answer light will flick on. If it doesn't find a carrier signal in 30 seconds it will go off-line and return control of the comms package.

The modem offers bauds speeds of 1200/75, 75/1200, and 300/300 which are set with a three-way switch on the serial interface. There are two communications modes: viewdata and teletype. Viewdata handles the static graphics of systems such as Prestel and Micronet, while teletype copes with the scrolling text of MUD.

The WS-4000 is one of the few modems which can gain access to a wide variety of bulletin boards. You may find that some of the boards listed in a special leaflet which accompanies the modem require special transmission format. Those are set using a menu within the comms package itself.

You can send pre-prepared documents to the Prestel Mailbox, or similar facilities, by storing your message frame in the Spectrum.

A frame processor views and lists the screen frames you have in the Spectrum's Ram. It also calls frame files from, and saves them to, cassette.

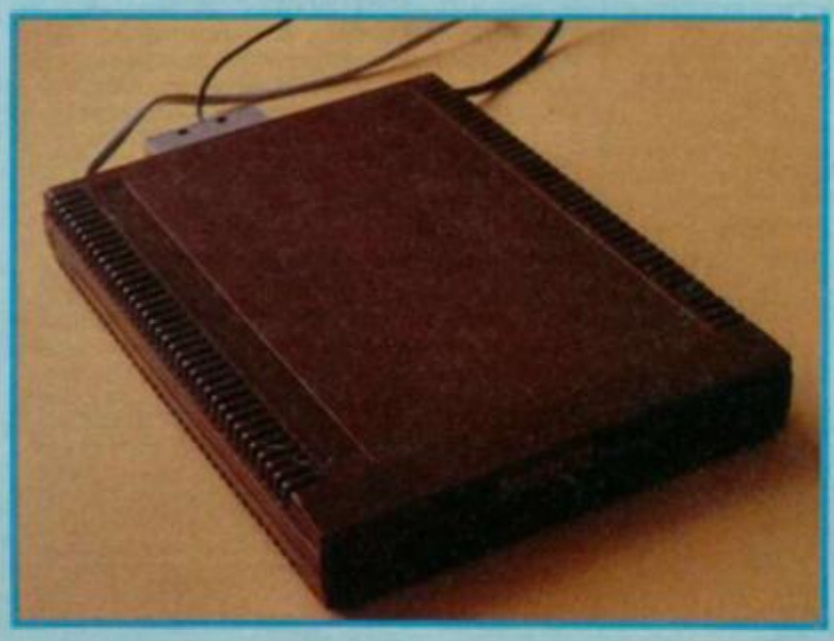
The WS-4000 can also download telesoftware from Micronet and Prestel — a simple matter. Wait for the host to display its instructions then press *Caps* and *Symbol Shifts* followed by q.

Each frame is down-loaded and, depending upon the information supplied, the program will either run automatically or be saved to cassette.

Miracle Technology's **Datas-pectrum** comms pack and WS-4000 modem are an unbeatable combination and the system is both flexible and powerful. The only problems are the complexity of operation and in understanding the general functions of the modem. If you want a simple method of getting on line, the WS-4000 is not for you. If, however, you want an advanced feature modem, look no further.

The WS-4000 package costs £149.95 and is available from Miracle Technology (UK) St Peters Street, Ipswich IP1 1XB ■

John Gilbert



Full feature Miracle

Power, simplicity and flexibility are the requirements of a good Spectrum modem/comms package combination, and the **Tandata QMod** modem and **Spectre Communications** software offers all the facilities you need to log on to Viewdata and bulletin board systems with 75/1200 baud compatability.

The software is activiated on power-up but you can drop back into **Spectre's** main menu. This gives access to a viewdata terminal mode, Save/Print frame facilities, a mailbox editor, a telesoftware downloader and a scrolling bulletin board utility.

Logging on is as simple as using a VTX-5000. Make sure that the on-line button is pressed and the pilot light is on, dial the number and wait for the high pitched tone from the host computer. When the response comes press the Line Seize button and, after a few seconds, press the On-line button again. If the carrier signal is successfully seized contact is made. If contact is not made within six seconds the line is disconnectred and you are returned to the menu.

The viewdata provides the normal on-line state for accessing viewdata hosts and provides 15 screen editor commands which include Escape Generation, Carriage Return and Cursor Home.

Spectre can grab screens from a host computer and store them in memory or on microdrive and cassette. You can have access to a maximum of 26 screens, created either by yourself or down-loaded from the host, and erase all or some of the stored frames, to create more Rom space.

Spectre's telesoftware downloader can grab Micronet programs which are encoded as a series of frames and sent down the line by the host. You can choose whether to log-off and run the program after it's been downloaded or remain logged-on and continue.

Mailbox messages can be prepared and edited before you log-on so that you can up-load them to a specific box without losing time and money.

Multi-User Dungeon, and some bulletin boards, can only be accessed through the use of scrolling software. **Spectre** has this facility but you will need a different modem for 300/300 since QMod's default baud does not allow these rates.

The **Spectre** printer interface default is for ZX-Alphacom-Timex, but you can set up the format for most printer interfaces. Software to drive an Epson compatible printer is provided but you can use a Kempston E Centronics interface.

The **Spectre Communications**

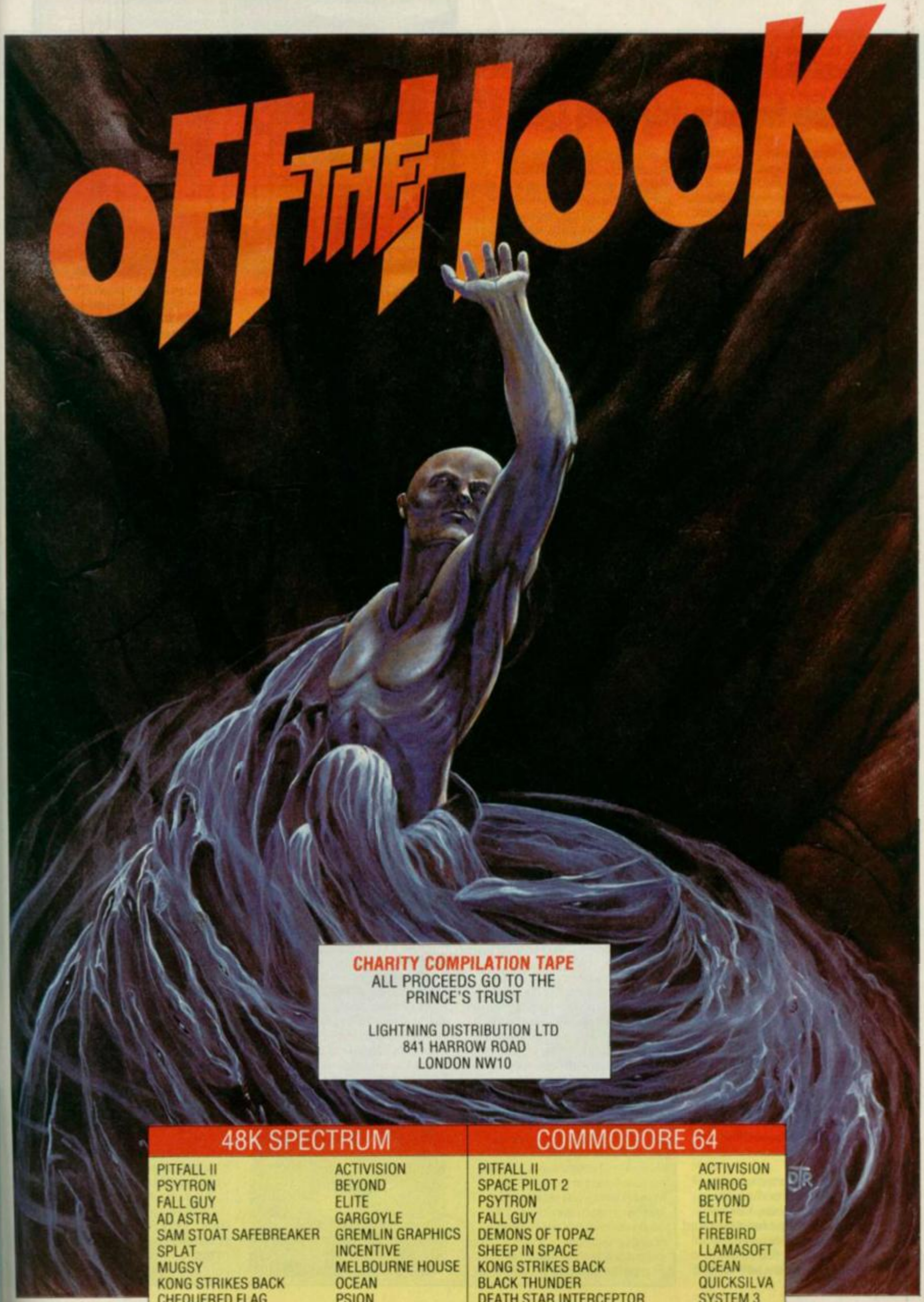
Package and Tandata's QMod modem form a friendly and easy-to-use alliance. **Spectre** provides an inexpensive introduction to the world of comms while also providing the sophisticated facilities for the more adventurous hackers.

QMod is simple to fit to the back of the Spectrum 128K or 48K and its two button operation — on-line and seize — makes it one of the most attractive modems for beginners.

The **Spectre Communications Package** and QMod modem are available at an introductory price of £91.95 until September 1. The price after that date is £99.95.

The package can be obtained from Tandata Marketing, Albert Road North, Malvern, Worcs WR14 2TL ■

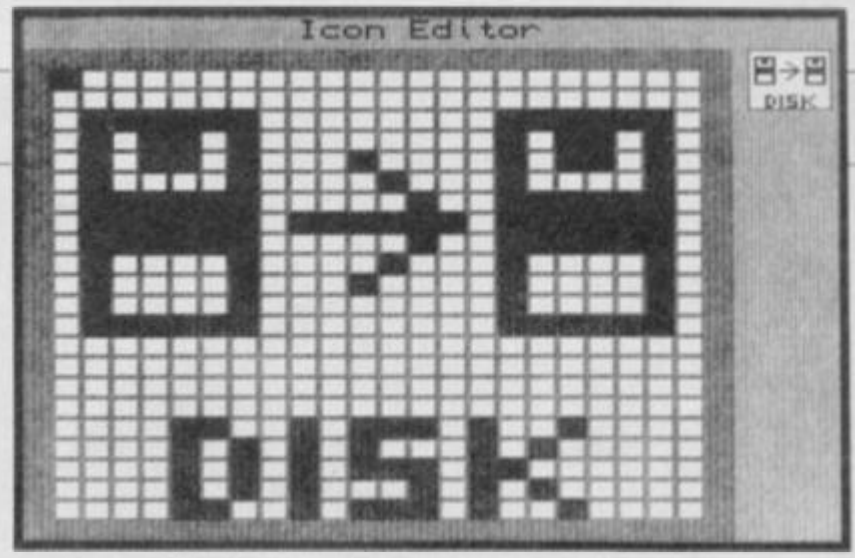
John Gilbert



48K SPECTRUM	
PITFALL II	ACTIVISION
PSYTRON	BEYOND
FALL GUY	ELITE
AD ASTRA	GARGOYLE
SAM STOAT SAFEBREAKER	GREMLIN GRAPHICS
SPLAT	INCENTIVE
MUGSY	MELBOURNE HOUSE
KONG STRIKES BACK	OCEAN
CHEQUERED FLAG	PSION
BLUE MAX	U.S. GOLD

COMMODORE 64	
PITFALL II	ACTIVISION
SPACE PILOT 2	ANIROG
PSYTRON	BEYOND
FALL GUY	ELITE
DEMONS OF TOPAZ	FIREBIRD
SHEEP IN SPACE	LLAMASOFT
KONG STRIKES BACK	OCEAN
BLACK THUNDER	QUICKSILVA
DEATH STAR INTERCEPTOR	SYSTEM 3
TALLADEGA	U.S. GOLD

Three in one for the QL



The Memodisk disc/printer/memory interface from Micro Control Systems for the QL is the only such interface — other than one from Micro Peripherals — that Tony Tebby had nothing to do with.

Despite that, or perhaps because of it, MCS has designed a package which combines all the essential features, plus some very novel ones. It is perhaps the best value interface on the market at the moment.

It's available in three versions: with no memory, 256K or 512K. If you have the extra memory, NCS also supplies a printer cable and utilities Rom with it. The contents of this Rom can be transferred to, and run from, disc for those who prefer to leave the Rom slot free.

Without the utilities Rom, the interface is pretty mundane. The commands contained in it are enough to run the interface but nothing to get excited about. The interface uses the device name 'FLP', the same as all the other Tony Tebby interfaces, so it's compatible with them.

Micro Control Systems seems to have taken some of the more useful ideas from Tebby, and then added a host of their own.

There are seven new commands.

One of the main problems when transfering programs to disc is that you have to change every occurance of *Mdv* to *Flp*. *Flp Use* can be used to make the disc respond to *Mdv*, which neatly gets round the problem. The other disc commands allow you the option to overwrite files automatically and verify automatically after every *Save*.

A printer command, *Par Use*, can make the parallel port respond to *Ser*, a useful addition as the Psion programs will not recognise *Par* as a printer port. And if you miss the sound of your typewriter, the last command, *Click*, makes the QL give out a short click whenever you press a key.

The interface comes into its own when you start using the utilities Rom. It adds nearly 70 new commands, everything from random access filing and multi-tasking to icons and windows.

Many of the extra toolkit commands mirror those from Tony Tebby, *Fopen*, *Flen* etc, perform the same functions and allow files to be opened for random access, file information, and a pointer set, both abolute and relative. Equally the wildcard *Wdir*, *Wcopy* commands perform the same Tebby functions, as do the spooling *Spl* commands.

Caps simply puts the *Caps Lock* on and off while *Cursen* and *Curdis* enable and disable the cursor respectively.

The *Edlin* command allows you to edit strings in Basic.

The *Keys* commands let you recall the last line you typed. *Submit* and *Task*. *Submit* can be thought of as a means of batch processing. It takes a file of commands, without line numbers, and executes them. More than that, it can put characters into the keyboard buffer just as though you had typed them in.

Task is really what the QL is all about, it allows you to have up to four programs in memory at once and switch between them. It's not true multi-tasking as the programs do not run in the background, but it's certainly a step in the right direction. The four programs can be anything that is normally started by the *Exec* or *Exec-w* statement, which includes Psion suite.

Further utilities cover the creation and use of icons, fonts and moe windows. Both the icons and fonts have a built in editor which allows them to be designed quickly and easily.

The window commands, allow the background to be restored when they are closed, but you can also move them around the screen leaving the background untouched.

The best feature, though, is undoubtedly the screen dump command. At any time press *Control P* (or *Control D* if you want to use the serial port) and two vertical and two horizontal lines appear on screen. These can be moved to encompass any section of the screen which is then dumped to the printer, with shading used to represent the colours.

If you are serious about you QL you need discs and preferably extra money. The Memodisk combines all these in one package, and has some excellent utilities to go with them.

Prices: without memory £99; 256K with printer cable and utilities £199; 512K with printer cable and utilities £249.

Micro Control Systems, Electron House, Bridge Street, Sandiacre, Nottingham NG10 5BA. Tel: 0602-391204 ■

John Lambert

Monitoring details

A colour monitor is a little like the phone, it may seem like you can do without it but once you get it you'll wonder how you could possibly have managed before.

The Chromographica colour monitors are not, in absolute terms, cheap but they are terrific value for money. There are certainly monitors around for less (the Ferguson monitor/TV for one) but the resolution of the Chromographic is significantly higher. What this means is that your software will look even more stunning than usual and you'll be able to read every misspelt word in every text adventure. It also has advantages when used with wordprocessors like **Tasword Two** which pack in the letters on a redefined 64-character screen.

Using **Heavy on the Magick** and **3D Starstrike** as test programs, the difference between viewing the games smudgily on a normal TV screen and seeing them pixel by pixel on the monitor is considerable. You begin to realise what you have been missing all these years. The odd semi-teletext style graphics of **Magick** were not an obvious test for a high-res monitor but nevertheless the clarity and sharpness of the monitor image enhanced the animated effects. **Starstrike** is pretty much your classic, 3D arcade bash 'em, collect 'em and dodge 'em, chock full of odd monsters, bizarre landscapes and multi-coloured explosions. It looked magnificent.

There are essentially four machines all of which use the same tube and electronics. The differences are in the casing and the sound. Wooden casings are marginally cheaper than metal and either casing option may come either with or without sound facilities. A Spectrum 128 will plug directly into the monitor. Other Spectrums need an interface which costs £29.42.

If you have a Spectrum 128 then you will have come to expect a decent level of sound output through the TV loudspeaker. Ordinarily this works like a TV signal and is fed down through the coaxial cable — on the 128 this is also true. Since the monitor uses the 128 RGB socket getting sound out has to be a separate process. There is a special sound version of the monitor which has a built-in loudspeaker and takes the sound out from the Ear socket of the Spectrum. Using the monitor with a conventional Spectrum is obviously less of a disappointment since the usual TV isn't sent any sound input anyway. Again, if you want sound you buy a special version of the monitor.

The monitor is designed functionally so there is little to say about the look of the thing — its a box with controls along the bottom — it won't be up for any design awards but it'll do. There are a few extra features that are of some marginal use. Most significant is a green screen mode — the best colour for wordprocessing supposedly.

The screen resolution is 585 × 895 pixels which means you could use it quite successfully with an Amiga on its higher graphics modes if you wanted, or a QL. As a high-res monitor it is astoundingly cheap.

Chromagraphica, 135 Cliff Road, Hornsea, North Humberside. Tel: 0482 881 065 ■

Graham Taylor

Prices

Wooden case	£364.70
Wooden case with speaker	£365.26
Metal case	£394.10
Metal case with speaker	£414.68
Interface (not necessary for 128 and QL)	£29.42

SURGERY

Sinclair Surgery

Spectrum on the blink? John Lambert has a cure

Pluses and minuses

I OWN a Spectrum Plus and wish to use it as a word processor, that is, if the cost is not greater than buying a separate word processor like the Amstrad PCW8256.

At present, i have **Tasword II** which restricts me to 64 cpl; I require the normal 84 cpl at least, I do not own a printer, but it must be capable of near letter quality on plain A4 paper.

I shall require some type of expansion and storage facility in the form of a disc drive. Is **Tasword III** and Microdrive, or Saga's **Last Word** and Opus a possibility?

I S McKellar,
Bowes Rigg,
Kilmarnock

● *To upgrade the Spectrum to a level close to the Amstrad PCW8256 could cost as much as the PCW. And bear in mind that the cost doesn't stop once you've got it home.*

Amstrad discs are twice the price of standard 3½inch disc, five times the cost of 5¼inch discs and hold only a fourth of the data. A box of 5¼inch discs costs £8.10, to get the same data storage on Amstrad discs could cost £160.

The Amstrad printer and disc drive are non-standard and won't work on any other computer. If you upgrade your Spectrum the new printer and disc drive you buy can be used on other machines.

Bearing in mind the cheapness and range of Spectrum software I'd stick with it for a while. It will never match the PCW8256, but it will certainly do until something better comes along. Both the combinations you suggest work well. As for storage it's a question of the cheapness of Microdrives versus the reliability of discs.

Screen dumps using copy

I HAVE a Spectrum Plus which I use with an Epson LX-80 printer. Because I had an Interface 1 prior to buying the printer I had an RS232 to Centronics interface fitted to the printer. It all works fine when using **Tasword II**.

My problem is getting a screen dump when using the Copy statement. Can you help?

J Welbery
BFPO 53

● *In its wisdom Sinclair designed the* Copy *command so that it would only work on a Sinclair printer — the silver toilet paper kind. The following program works on an Epson compatible printer, but it does take rather a long time. (Not so much take a coffee as go to Bolivia and pick the beans while it runs).*

Machine coded versions from readers will be welcome.

Screen Dump Listing

```
10 FORMAT "b" baud-rate: REM set baud-rate to suit printer
20 OPEN #3; "b": REM open binary channel to printer — using channel 3 so you use LPRINT
30 LPRINT CHR# 27; "A"; CHR$ 8;: REM set 8/72 inch line spacing
40 FOR v=168 to 0 STEP -8
50 LPRINT CHR$ 27; "K" CHR$ 0;C HR$ 1;: REM prepare for 256 bits of data
60 FOR x=0 to 255
70 LPRINT CHR$ (POINT (x, y) +2 *POINT )x, y+1) +4*POINT (x, y+2) +8*POINT (x, y+3) +16*POINT (x, y+4) + 32*POINT (x, y+5) + 64*POINT(x, y+6) +128*POINT (x, y+7);: REM assemble data bit and send it
80 NEXT x
90 LPRINT CHR$ 13; CHR$ 10: REM send carriage return/line feed — adjust to printer
100 NEXT y
110 LPRINT CHR$ 27; "A"; CHR$ 12: REM reset line spacing
```

Disappearing Microdrives

A LITTLE problem with Uncle Clive's Microdrives, I've owned these fun toys for about a year now, and I am coming up with an interesting fault.

If you have ever looked inside a Microdrive drive, you'll see on the right-hand side, a pair of microswitches. These switches tell the driver a) whether there is a cartridge actually in the drive, or b) whether that cartridge is write-protected.

Problem is, the plastic casings on some of my cartridges (now almost a year old) have been worn away due to excessive use, and now when I try to load anything from these cartridges I get the error: 'Microdrive not present'.

Being an adventurous type, I have semi-dismantled my drives, but cannot get to the offending microswitches to either adjust them or short them out. Has anyone else had a similar problem? If so, how did you overcome it? I have tried matchsticks, bits of insulating tape etc to pack the cartridge out, but the springs on the microswitches are so vicious that the bits of match, tape etc just get cut to ribbons or fall inside the drive. (Warranty? Who mentioned warranty?)

Adam Nix,
mildly-ageing computer fiend,
Mount Pleasant,
Swansea

● *The most common cause of the 'Microdrive not present' message is a dirty connector. Try cleaning the edge connectors with an India rubber or proprietory cleaner.*

If you really want to throw caution, and your warranty, to the winds and open the microdrive there are two screws hidden under the metal plate on the top of the drive. It's held on with very sticky double sided tape so ease it off gently.

Customising Tasword

Whilst searching through some old *Sinclair User* magazines, I came across an article by John Lambert on customising your world processor — **Tasword II** (May 1985). This interested me into customising my own **Tasword II**.

However: i) paper and ink changes — no problem; ii) line count — no problem; but iii) world count — help!

Following the instructions, I typed in Listing 1, ran it, and saved the code. I then altered the **Tasword** but it ran as normal with no word count. Then using the Pictureseque Editor/Assembler I tried to assemble Listing 3. The assembler will not accept six-letter label names ie FILEST, DEFADD etc.

My Spectrum 48K is fitted in an Lo-profile keyboard, but surely this makes no difference?

R L Hesford,
Swinton,
Manchester

● *That'll teach you not to buy* Sinclair User *regularly, there was an update printed in the Aug '85 issue.*

What wasn't clear in the original article is that once you have loaded the amended Basic (Listing 2) enter, as a direct command, Clear *31940 then load the word count code. To call it, run the program, go to the* Stop *menu and press 'W'.*

Problems of getting old

My Spectrum computer is now over two years old. I have been using it regularly without problems, until recently.

Two problems spring to mind. The first concerns the power socket and the lead to the power unit. The slightest move or contact with either part causes a complete system reset — probably due to wear resulting from pulling out the plug when resetting the computer.

The second problem is not so obvious. Whilst playing **Chuckie Egg** I had reached level two. I jumped from the top right-hand level and struck the adjacent ladder. This caused the game to freeze, then a series of white lines appeared on top where the graphics should have been. I suspected the power problem had caused this but the Spectrum did not return to Basic as usually occurs. I pulled the plug and decided to *Load* in **JSW**. I typed the *Pokes* into the game. I pressed *Caps Shift* and *Break*, to allow access, when the screen went totally white, refused to display the *Break* report, and no keys functioned. I reset the Spectrum. On turning on the power, the screen turned black with various red lines and flashing coloured squares in the top section.

P Robb
Malaysia

● *If the power socket is loose you should be able to obtain a new one and solder it in. As you've found to your cost, a loose socket can lead to other problems; try the Regulator. TR4, or if all else fails the ULA.*

Monsterous murder at Mortville Manor

John Gilbert interviews the suspects in the first QL murder mystery

An urgent telegram, the anguished plea of an old friend and the chance to revisit your childhood home build up the Poe-like atmosphere of **Mortville Manor**, Pyramide's latest game.

The manor has changed since you last saw it. A smooth blanket of snow covers all traces of the past. Why are you here? What draws you back to this dark eerie mausoleum?

It's an unusual adventure in both plot and execution. Motive, rather than monsters, make the game, which includes a novel use of window graphics.

During play the screen is split into seven windows. The first four deal with game mechanics and show the characters present in your location, a picture of the scene, your commands and the computer responses. The last three display speech from characters, give system commands and display the time.

Each window is used in the three game modes — action, discussion and object. Action mode takes you round the manor and grounds. Just type **Go** and a menu of all adjacent locations appears. Use the cursor keys to move through it and *Enter* to travel to new locations.

Locations are depicted in stunning, full-screen, graphic detail. The QL does not draw them quickly but the detail, colour and atmosphere conveyed make the wait well worth while.

You can also look at specific points of a scene by typing *Look* or *Read*, and moving an arrow pointer to the feature you want to examine. You'll usually get a few words about atmosphere, such as 'dark' and 'damp', or if you're lucky, a message.

Characters

Mortville Manor has a good smattering of characters, all of whom are relations of Julia, the friend who pleaded with you to come to the house, but was murdered before you got there.

The discussion mode lets you talk to the house guest, but the vocabulary is limited and your audience unresponsive if you don't ask the right questions. When you want to *Talk* select one of the characters in the room from a menu at the top of the screen. The display is then split. A portrait of the character is shown on the left side of the screen and their speech is displayed on the right.

In talk mode the character says 'Yes' and expects you to answer. If you ask something which is not in the game's dictionary the character answers "Pardon?" and you'll have to repeat the question.

Although vocabulary is limited, the instruction manual gives a sketchy list of the important verbs. Unfortunately, the list gives only the first letter of each word followed by dashes. An inventory is provided with the command *List* and *Open* takes care of closed drawers and locked cabinets. To investigate a locked object,

▲ *Mortville Manor*

move the pointer arrow to the drawer or door and press enter.

Though the verbs list is a partial secret there's no cover up in the list of nouns. The authors have, however, included some nouns in the list which are not used in the game. You've got to work out if Rape, Kidnapping, Murder and Mistress are important to the inhabitants of the manor. Two of those words are important but one is more innocuous than it seems.

Suspects

You'll only solve the mystery if you talk to the characters. It's a slow, often monotonous business and the cast don't always co-operate. There's Max, the friendly butler, who shows you to your room, tells you that Julia is dead and gives you the lengthy cast list.

Leo is the head of the household and, with Julia now buried, a widower. Leo's sons are Pat and Guy. Pat is the heir to the family fortune and is president of a perfume corporation — well somebody has to be. He's helped by cousin Bob.

Guy, is a morose young man who was pre-occupied with his mother's health. Now he's pre-occupied with her death and says very little under interrogation.

Guy's cousins are Bob, who you've met, and Luc, a shifty-eyed youngster who's married to Ida. Luc lurks around other people's bedrooms and orders you out if he finds you snooping. Speech at Mortville is no easy matter. It's an involved process

▲ *Character Mode*

Touch Typist

Learning to touch type on the QL is like learning to swim in the Dead Sea. It keeps you up and going but is very hard work.

Despite this, several programs for teaching and improving typing skills are available for the QL. The latest is **Touch Typist Version 4** from Sector Software. Like the other programs the aim is to type a series of 'sentences' concentrating on speed and accuracy. The targets, which default to 15 words per minute and 90 per cent accuracy, can be reset as low as ten wpm and 80 per cent respectively.

The screen display is neat and attractive with a QL keyboard in the top half and the sentence being typed, together with the targets and other information, in the bottom half.

A series of pull-down menus are used to select the many features which include the manual, demo mode, tutorial, and progress charts with saving and loading of results. The tutorial is a compact introduction to where the major keys are and which fingers should be used.

The backbone of the program is the 200

QL Mail List

One of the main reasons people buy a word processor is so they can produce standard letters.

QL Mail List ***from Transform provides both the actual mailing list and a mail-merge program to insert details into a Quill file from the mailing list.***

The programs take some time to load as they are written using the Archive database language, and the Archive run time module must be loaded into memory first.

Two types of mailing list, personal and business, can be created and twelve fields are used in the personal list compared to eleven in the business list. Both allow five lines of address, telephone number, reference and two lines of details. The difference lies with three names fields-title, forenames and surname — for personal mailing lists compared to a company name and contact for the business list.

Different mailing lists can be created on different files and loaded from within the program. When a list is loaded it can be sorted on any field.

The main display shows a single record with its place in the file; an alternative display shows a single record with its place in the file; an alternative display of names and partial addresses is also available. A menu of options is shown at the bottom of the screen, selected by a single keystroke.

Unlike the usual commands which step forwards or backwards one record at a time; a batch of up to nine records can be taken by pressing a number between one and nine.

The program is set up to print on Epson compatible printers using labels or continuous stationery. For labels, the number of lines can be set, while for continuous stationery the one-line details are printed in condensed type.

Selected records can be printed using the 'Specific' option which allows records to be selected from a string or by stepping through a file record by record.

Before the mail-merge facility can be used the list must be duplicated and reformatted. Though not complicated

sentences which can be edited, saved and reloaded to give as much and as varied practice as is necessary. At the start, the in-built sentences are well structured, gradually building up the number of fingers and characters used. As you progress, though, you will soon find the sentence editor useful.

Variations can be achieved by typing sentences one at a time or in groups. Using the sentence editor and the groups option, the typing of long sections of text can be practised. Unfortunately, this does not include the use of the new paragraph/carriage return/ENTER key which does not appear to have been considered important. Although it may be.

The best speeds achieved for single sentences are kept and can be displayed on a graph. All 200 sentences are included on the graph even if some have not been reached. While the results can be displayed, saved and reloaded they cannot be printed, which makes historical comparisons almost impossible.

Publisher Sector Software, 45 Cheetham Meadow, Moss Side, Leyland, Lancs PR5 3UB.
Price £11.95
*****

which quickly has you cursing your hosts and wanting to go back to your dusty little detective agency.

First, you must use Talk mode and the cursor driven menu to pick your subject who appears in high resolution, on the left side of the screen. A large speech bubble on the right-hand side logs everything the character says.

For starters, try asking everyone their occupations. You must paraphrase every question you want to ask. So, if quizzing Guy, instead of "What is your occupation?" you must use Guy's occupation. Strange but effective.

Objects

To a detective objects are as important as people — we're talking about Sherlock Holmes here, not Adam Dalgliesh. There are plenty of clues scattered around and you'll enter object mode as soon as you stumble on the first one of them.

these steps allow more room for things to go wrong.

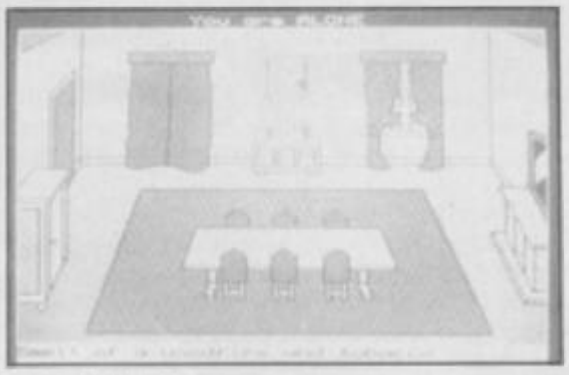
The mail-merge program uses Quill's print-to-a-file facility to save the text in a suitable form to accept data from the mailing list. Like similar programs I have seen for the QL, the mail-merged text cannot be rejustified. This causes few problems if a letter is being 'topped and tailed', but if text is added to the body of a letter then overwriting or large spaces can occur.

A null text facility allows the option of printing a default value. Having set the default for any field, when a blank occurs for that field the default is printed automatically.

While some of you would like to see a conditional search facility eg if ref$ › 5.60 print — it is not absolutely necessary.

QL Mail List contains most of the other options ever likely to be needed for the smooth maintenance of a mailing list.

Publisher ***Transform Ltd, 24 West Oak, Beckenham BR3 2EZ***
Price ***£14.95***
****



▲ *The Dining Room*

You already have the telegram and a revolver in your pocket — for protection — and to solve the mystery of **Mortville** you'll need to explore every room of the manor to discover the important objects. It's a hard slog but, coupled with the information gleaned from characters and the furnishings in their bedrooms, you'll suss out the masterly plot to usurp the family fortune and heritage. Edgar Allan Poe and the inhabitants of Usherland would be pleased with this plot.

QLINK

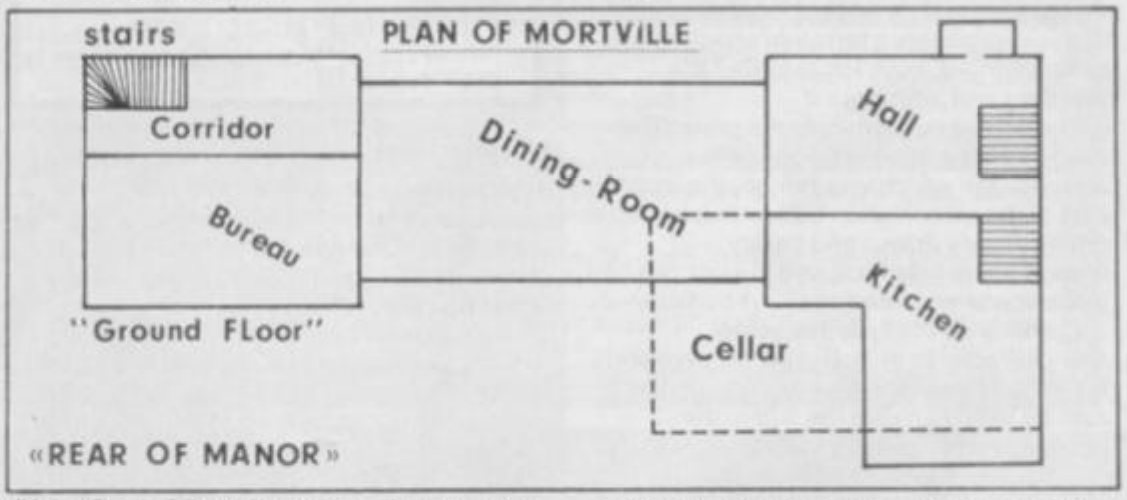
Scene of the crime?

Mortville Manor is a show house for the mystery contained in Pyramide's latest game. It contains all the element for the solution of the puzzle but is not, literally, the scene of the crime.

The game pulls off a difficult conjuring trick. It has all the hall marks of a classic who-dunnit but you must realise that the solution lies in how the characters live and react. For instance, what objects does the head of the household surround himself with? What will he tell you about other characters.

Pyramide's adventure is for stickers who like a good mystery and are willing to play for months to get into the game.

Publisher Pyramide
Price £14.95
*****



Dining Room ● Breakfast at 7am, dinner at 12am ● If you Wait around for an hour characters will wander in and out ● Look around while you wait to interview family members

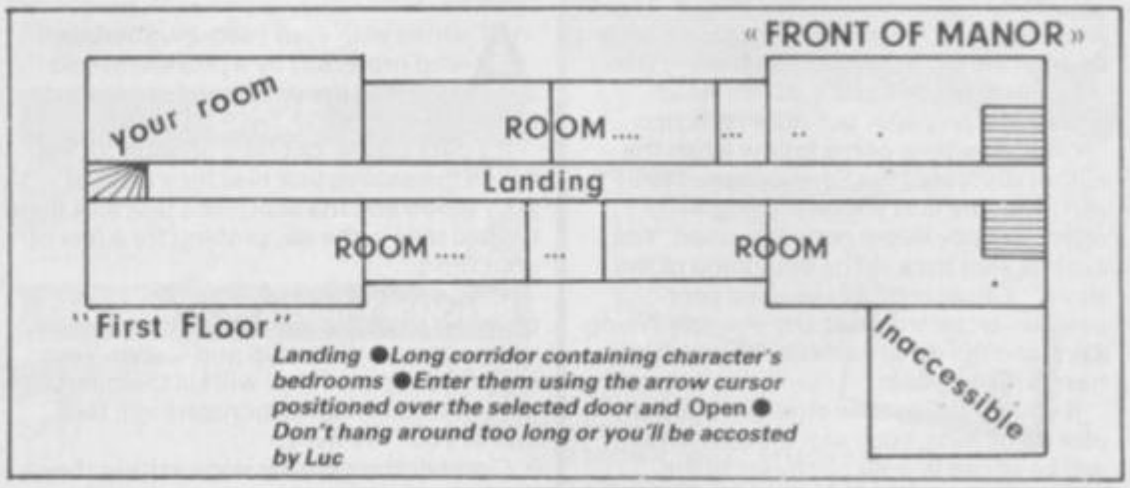
Hall ● First room you see when you enter the manor ● Max hangs out here

Your bedroom ● *Place of sanctuary and rest ● You can* Sleep *here until morning*

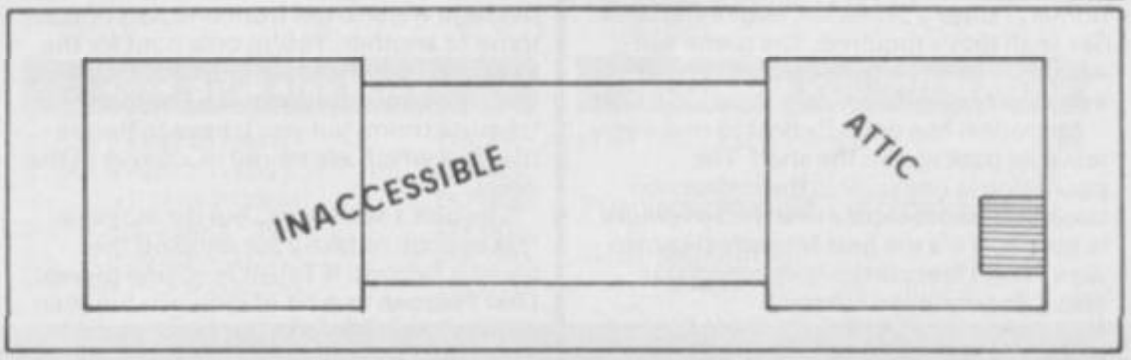
Kitchen ● *Plenty to* Look at ● *Max can be found here*

Cellar ● A dank place ● Strange symbols in pillar supports

Bureau ● Papers, paper everywhere ● There are blocks to Read *and Leo uses this as his research room*



Landing ● Long corridor containing character's bedrooms ● Enter them using the arrow cursor positioned over the selected door and Open ● *Don't hang around too long or you'll be accosted by Luc*



Attic ● Full of interesting — if not relevant — bric-a-brac
Inaccessible ● Secrets you'd rather not know anything about

The well (at back of manor) ● Deep and dark ● The only place of interest outside the manor ● Don't wander too far or you could be hit by an avalanche

QLINK

Aquanaut 471 — under the doomed sea

The undersea cities of the 21st century form the waterscape against which **Aquanaut 471 — Under the Doomed Sea** is set.

You play the Aquanaut, a high ranking member of the Oceanic Federation — dedicated to keeping the peace — and spending all your time patrolling the city domes. You start the game in a submarine bound for a research station.

A mysterious call for help, from Service Droid Huey-14, draws you there but the transmission was terminated before he got any futher than "Agggh!" — probably a bad or changed medium. Something mysterious and deadly is happening at the dome — probably a terminal attack of bad programming. Your job is to find the problem and eliminate it.

The screen comprises three parts. The top line tells you where you are and directions in which you can go, the middle part of the screen shows you where you are (in slowly drawn and barely recognisable graphics) and the bottom half is the command window.

Commands are typed in using one-character keys such as *D* for dive and *L* for look. The cursor keys or joystick can also be used to move the sub in the cardinal compass points. You can also type in (very) simple sentences.

The game, according to Microdeal, contains many baffling mazes in which directions are 'not as they seem.' What this seems to mean is there's no logic to the game. The author of the manual, who is to literature what a donkey is to steeplechasing, gives some clues on how to map out a maze. "Drop one of your objects and then move away from it. Then when you find it again you should be able to draw the path that got you there". Wise, if bungled, prose but it's advice which works well on paper but not in practice.

Greater witless gems follow when the author discusses the *Save* option. "You will probably find yourself being killed often. Happily this is not permanent. You are just sent back to the beginning of the story." You can, however, save your position on cartridge at any point by typing *Save* and the drive number. Shame if you have a disc system.

If you've still got the strength you can pick up objects, such as a blaster, which will be of use in your conquest of the dome. A simple sentence, beginning with *Get* is all that's required. The game will accept an 'and' conjunction but ignore everything after it.

Microdeal has done its best to make you leave its package on the shelf. The packaging is unexciting, the instruction booklet is photocopied and the adventure is boring. If it's the best Microdeal can do then I don't feel particularly optimistic about its continued survival.

Publisher Microdeal
Price £14.95
Joystick
★★

Pro Pascal

Prospero, like its Shakesperian counterpart, still practices its art on the QL despite Amstrad's curse on the machine.

The company's latest language compiler package, **Pro Pascal**, promises to be a stolid seller with no great surprises.

Pro Pascal consists of a boot Rom, three microdrive cartridges and a massive manual. The cartridges contain the language linker, run-time library and configuration programs. They do not, however, contain an ASCII editor. You'll have to buy, or write, one before you create any Pascal source files.

The two-pass compiler produces binary object code in a simple but time consuming process. Microdrive 1 takes the compiler cartridges while Microdrive 2 takes your source code. You then specify your compile options. You can dump error messages to a file, check the range of

```
PROCEDURE upper (fch: char);
  BEGIN
    IF fch IN ['A'..'Z'] THEN
      writeln (output, 'Upper case');
  END  {upper};
```

A short piece of code, called a header, defines the variables which will be used in the program

indexes, assignments and pointers, produce a source listing, and represent real constants in double precision. The compiler can also be set to accept only strict ISO standard Pascal.

Source errors are listed on the screen, usually during the first compile-time pass, and can be output to a Microdrive file. Error messages comprise a source line number an error code and a listing of the fouled line. An additional error explanation appears if you invoke the text file *Propas Err*. Common errors include illegal variable declations, improper Pascal structures and insufficient memory on Ram of device.

When the second pass is complete the compiler displays the name of the new binary file and the bytes used by code and data.

The compiled object code — resident in Microdrive — is then linked into the Pascal program library from which several routines are added to it. The linker can also be used to collate several source-file modules into one program.

Object code is position independent, re-entrant and can be burnt on to Rom. The full 24-bit address range of the 68000 processor is used for both code and data so

```
program = program-heading ";" block "."
program-heading =
  "PROGRAM" identifier [ "(" global-parameter-list ")" ]
global-parameter-list = identifier-list
identifier-list = identifier {"," identifier}
```

Pascal programs are often structured in procedures, each of which has a function

that large programs can be developed and strung together using the linker.

The package's Rom cartridge, or a copy of the Prospero Resident Library in Ram, must be operative before you can run your object code. The library contains machine-code routines which are required by all Pascal programs. If you accidentally power up the QL without the Rom plugged in the back you can invoke a copy of the library from Microdrive into Ram.

Pro Pascal is a powerful language but pulls no punches over its only serious rival on the market, Metacomco's **Pascal Development Kit**.

There is little to choose between the two packages although the Metacomco **Pascal** contains a ASCII source editor and does not involve so much cartridge swapping.

Metacomco has the edge if you're looking for a beginners package but, after that, there's no way to separate the language programs — both are good.

Publisher Prospero Software, 190 Castelnau, London SW13 9DH
Price £99.95
★★★★★

Lost Pharoah

Armed with your rusty blunderbus and protected by a pith helmt you step into the cool, sandstone shade of the tomb.

It's dark inside, but light enough for you to see the snakes that hiss for a taste of your blood and the scorpions that flick their barbed tails in the air, probing for a feel of your flesh.

The corridors and caverns of the lost pharoah's tomb are dotted with recesses where its guardians slip and slither. Your endless supply of shot will kill them but, get too close and the monsters will take one of your five lives.

Clamber through the wide exits in the passage walls to get from one part of the tomb to another. You're on a hunt for the keys that unlock sealed entrances. One of those entrances unlocks the Pharoah's treasure room, but you'll have to find *all* the keys which are stored in alcoves in the walls.

The plot's well-worn, but the action is fast enough to take your mind off the game's failings. If Talent is willing to treat **Lost Pharoah** as a bit of innocent fun then so must we — despite the extravagant price.

Lost Pharoah may be old-straw-hat by Spectrum standards, but on the QL its like a refreshing breath of foul air.

Publisher Talent
Price £14.95
Joystick
★★★★

QEP III Advanced EPROM Programer

The **QEP III** EPROM programmer was designed specifically to meet the need for a highly reliable means of programming EPROMS. It is cased, with resident firmware in ROM and fits in the QL expansion slot or an expansion unit.

QEP III provides verification of EPROMS at 4V 4.3V 4.7V 5V 5.3V 5.7V and 6V: under and over voltage verification is essential for reliable EPROM service. It also features fast programming at voltages of 12.7V, 21V and 25V.

QEP III can program 16k to 512k EPROMs with standard pinouts, or the data and address pins may be re-assigned for ease of PCB layout.

QEP III can program EPROMs for multiple EPROM sets without any need to reload the data and it can program just part of an EPROM.

QEP III is fully menu driven, making it not only powerful but easy to use.

QTK II Super Toolkit

QTK II, the QL Super Toolkit, is a rewritten version of the original QL Toolkit.

QTK II has full networking for file serving, messaging etc., PRINT_USING, wild card copying, deletion etc., programmable keys, last line recall, SuperBASIC editor, default directories, alarm clock etc., etc., etc.

Essential for all serious QL program developers and educational establishments, it is available in ROM and (in a configurable form but without the network facilities) on Microdriver or floppy disc.

QMON Monitor Debugger

QMON II is the debugger for the QL: only **QMON II** has all the features essential for effective machine code debugging.

QMON II has single line assembler/disassembler — not just the simple disassembler of other monitors, but a complete memory editing MC6800 assembler for correcting or patching code.

QMON II has comprehensive trace facilities — not just single stepping, but multi stepping, invisible trace, back trace and a macro command executable every trace step. You can trace to a printer or a file.

QMON II has comprehensive breakpoints — not just on instruction addresses, but on register values and memory values as well. With the invisible trace, you can even breakpoint ROM.

QMON II has pull-down windows — not just the fixed windows of other monitors but windows that restore the QL's screen after use, so that **QMON** can be used with programs that use the screen themselves.

QRAM RAM Based Utilities

QRAM is not just another fast RAM disk for the QL. **QRAM** is a a set of utilities to get the most out of your expansion RAM.

QRAM includes a dual function RAM disk, a general purpose printer buffer, an instant access print spooler, resident file system maintenance utilities and more besides. All are designed specifically to mulitask even with the PSION prorgams.

QFLP Upgrade

QJUMP is the foremost supplier of QL floppy disk interface software. Upgrade your Sinclair/Micro Peripherals disk interface to the standard.

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Please add £2.00 for 3½" disk.
All prices include VAT at 15%.

For more information on these and other **QJUMP** products, please send an SAE.

If your QL dealer does not have the products you require, you may order direct, using ACCESS/Mastercard or cheque with order. Please add £1.00 pp (UK) or £2.00 pp (UK) for ROM version QTK II.

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VISA

MEGATRON

We didn't have a game last month, so here's one from Steven Day of the West Midlands.

***Megatron* isn't that complex and it doesn't even have stunning arcade-quality graphics. But it is addictive!!! And it's not that long.**

All you have to do is collect the fruit, and that's it! Oh, you must mind out for the other sort of crate things, because they kill you . . .

All controls are explained in the program, and it's simple to play, so what are you waiting for? Type it in

```
  1 PAPER 0: BORDER 0: CLS : PO
KE 23562,1: LET z=0: LET q=0: LE
T k=0: LET lvs=4: LET b=1: INPUT
 "Do you want instructions?"; LI
NE d$: IF d$="y" THEN  GO SUB 97
00: IF d$="n" THEN  GO TO 2: GO
TO 1
  2 REM GAME
  3 RESTORE : INK 1: PAPER 1:: 
BORDER 1: CLS : INK 7: PAPER 7:
CLS : FOR a=18 TO 21: FOR c=0 TO
 31: PRINT AT a,c; INK 1;"gsp":
NEXT c: NEXT a:
  4 PRINT AT 19,0; INK 6; PAPER
 1;"Score ";z
  5 PRINT AT 19,14; INK 6; PAPE
R 1;"High score ";q
  6 PRINT AT 20,0; INK 6; PAPER
 1;"Objects ";k
  7 PRINT AT 20,14; INK 6; PAPE
R 1;"Lives left ";lvs
  8 FOR a=USR "a" TO USR "c"+7:
 READ v: POKE a,v: NEXT a: DATA
60,126,165,126,60,24,24,60,60,24
,60,90,102,102,90,126,8,16,126,2
55,255,255,126,60
  14 FOR a=0 TO 31
  15 PRINT AT 0,a; PAPER 6; INK
b;"g6"
  17 NEXT a
  20 FOR a=0 TO 18
  25 PRINT AT a,31; PAPER 6; INK
 b;"g6"
  27 NEXT a
  30 FOR a=31 TO 0 STEP -1
  35 PRINT AT 18,a; PAPER 6; INK
 b;"g6"
  37 NEXT a
  40 FOR a=18 TO 0 STEP -1
  45 PRINT AT a,0; PAPER 6; INK
b;"g6"
  47 NEXT a
  48 DATA 2,4,2,5,2,6,2,7,2,8,2,
9,2,10,2,11,2,12,2,13,2,14
  49 DATA 3,1,3,2,5,3,5,5,5,7,5,
9,5,11,7,3,7,5,7,7,7,9,7,13
  50 DATA 9,1,9,2,9,5,9,8,9,11,1
1,4,11,5,11,6,11,7,11,8,11,9,11,
10,11,11,11,12,11,13,11,14
  51 DATA 13,1,13,2,13,3,13,4,13
,5,13,6,13,7,13,8,13,9,13,10,13,
11,13,12,15,4,15,5,15,6,15,7,15,
8,15,9,15,10,15,11,15,12,15,13
  52 DATA 15,14,2,15,11,15,15,15
  53 DATA 3,15,4,15,5,15,6,15,7,
15,8,15,9,15,10,15,12,15,13,15,1
4,15,16,15
  54 DATA 2,27,3,16,3,17,3,18,3,
23,3,25,4,19,4,20,4,30,5,16,5,20
,5,21,5,22
  55 DATA 6,22,6,23,6,24,7,17,7,
18,7,24,7,25,7,26
  56 DATA 8,27,8,28,9,20,9,21,9,
22,9,24,10,26,11,17,11,18,11,19,
11,21
  57 DATA 12,28,13,20,13,23,13,2
5,14,26,15,17,15,18,15,20,15,21,
15,22
  58 DATA 10,29,11,29,12,29,13,2
9,14,29,15,29,16,29,7,22,8,22
  60 DATA 2,1,4,14,14,1,8,11,12,
14,1,27,4,16,5,23,6,25,8,20,16,1
6,16,22,16,30
  61 DATA 16,2,10,5,10,6,10,7,10
,8,10,9,10,10,10,11,2,16,2,18,3,
30,4,22,5,24,6,17,6,26,8,21,11,1
6,13,22,15,19,16,23,16,24,16,25,
16,26,16,27,16,28
  80 FOR a=1 TO 62: READ s: READ
 t: PRINT AT s,t; INK 1; PAPER 7
;"g3": NEXT a
  82 FOR a=1 TO 3: READ s: READ
t: PRINT AT s,t; INK 1;"g7": NEX
T a
  83 FOR a=1 TO 12: READ s: READ
 t: PRINT AT s,t; INK b; PAPER 7
;" 5": NEXT a
  84 FOR a=1 TO 42: READ s: READ
 t: PRINT AT s,t; INK 1;"g3": NE
XT a
  85 FOR A=1 TO 9: READ s: READ
t: PRINT AT s,t; INK 1;"g5": NEX
T a
  86 PRINT AT 10,29; INK 1;"g7":
AT 6,22; INK 1;"g7"
  88 FOR a=1 TO 13: READ s: READ
 t: PRINT AT s,t; INK 2; PAPER 7
;"C": NEXT a
  90 FOR a=1 TO 25: READ s: READ
 t: PRINT AT s,t; INK 3; PAPER 7
;"B": NEXT a
 130 FOR a=1 TO 30
 135 PRINT AT 17,a; PAPER 7; INK
 b;"gsp"
 137 NEXT a
 140 PRINT AT 16,14; INK 1;"A"
 145 LET x=16: LET y=14
 146 PRINT AT x,y; INK 1;"A"
 150 IF ATTR (x+1,y)<>57 THEN  G
O SUB 7300
 151 LET a$=INKEY$: IF a$="" THE
N  GO TO 151
 152 PRINT AT x,y;" "
 155 IF IN 31=2 OR IN 31=10 OR I
N 31=6 OR a$="q" THEN  LET y=y-1
: IF ATTR (x,y)=57 THEN  LET y=y
+1
 157 IF y<1 THEN  LET y=1
 158 IF IN 31=1 OR IN 31=9 OR IN
 31=5 OR a$="w" THEN  LET y=y+1:
 IF ATTR (x,y)=57 THEN  LET y=y-
1
 159 IF y>30 THEN  LET y=30
 160 IF ATTR (x,y)=58 THEN  GO S
UB 8000
 161 IF ATTR (x,y)=59 THEN  GO S
UB 8100
 163 BEEP .005,-10: PRINT AT x,y
; INK 1;"A": PAUSE 4: IF ATTR (x
,y)<>57 THEN  LET x=x+1
 164 IF IN 31=18 OR IN 31=26 OR
IN 31=22 OR a$="o" THEN  GO SUB
7000
 165 IF IN 31=17 OR IN 31=25 OR
IN 31=21 OR a$="p" THEN  GO SUB
7100
 166 IF IN 31=16 OR a$="m" THEN
 GO SUB 7200
 168 GO TO 146
7000 REM
7001 REM        jump left
7002 REM
7010 FOR a=0 TO 1
7011 PRINT AT x,y;" "
7012 IF x=1 THEN  GO TO 7020
7014 LET x=x-1
7015 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7016 IF ATTR (x,y)=59 THEN  GO S
UB 8100
7017 IF ATTR (x,y)=57 THEN  LET
x=x+1: GO TO 7020
7018 BEEP .005,a+10: PRINT AT x,
y; INK 1;"A"
7019 PAUSE 4: NEXT a
7020 FOR a=0 TO 1
7021 PRINT AT x,y;" "
7022 LET y=y-1
7023 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7024 IF y=1 OR y=0 THEN  LET y=1
: GO TO 7030
7025 IF ATTR (x,y)=59 THEN  GO S
UB 8100
7026 IF ATTR (x,y)=57 THEN  LET
y=y+1: GO TO 7030
7027 BEEP .005,-10: PRINT AT x,y
; INK 1;"A"
7029 PAUSE 4: NEXT a
7030 FOR a=11 TO 0 STEP -1
7031 PRINT AT x,y;" "
7032 LET x=x+1
7033 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7034 IF ATTR (x,y)=59 THEN  GO S
UB 8100
7035 IF x=16 THEN  RETURN
7036 IF ATTR (x,y)=57 THEN  LET
x=x-1: GO TO 146
7037 BEEP .005,a : PRINT AT x,y;
 INK 1;"A"
7039 PAUSE 4: NEXT a
7040 RETURN
7097 REM
7098 REM        jump right
7099 REM
7100 FOR a=0 TO 1
7102 PRINT AT x,y;" "
7103 IF x=1 THEN  GO TO 7110
7104 LET x=x-1
7105 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7106 IF ATTR (x,y)=59 THEN  GO S
UB 8100
7107 IF ATTR (x,y)=57 THEN  LET
x=x+1: GO TO 7110
7108 BEEP .005,a+10: PRINT AT x,
y; INK 1;"A"
7109 PAUSE 4: NEXT a
7110 FOR a=0 TO 1
7111 PRINT AT x,y;" "
7112 LET y=y+1
7114 IF y>30 THEN  LET y=30: GO
TO 7120
7115 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7116 IF ATTR (x,y)=59 THEN  GO S
UB 8100
7117 IF ATTR (x,y)=57 THEN  LET
y=y-1: GO TO 7120
7118 BEEP .005,-10: PRINT AT x,y
; INK 1;"A"
7119 PAUSE 4: NEXT a
7120 FOR a=9 TO 0 STEP -1
7121 PRINT AT x,y;" "
7122 LET x=x+1
7123 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7124 IF x=16 THEN  GO TO 146
7125 IF ATTR (x,y)=59 THEN  GO S
UB 8100
7126 IF ATTR (x,y)=57 THEN  LET
x=x-1: GO TO 146
7128 BEEP .005,a: PRINT AT x,y;
```

```
INK 1;"A"
7129 PAUSE 4: NEXT a
7140 RETURN
7200 REM
7201 REM        jumpup/down
7202 REM
7210 FOR a=0 TO 2
7211 PRINT AT x,y;" "
7212 LET x=x-1
7214 IF x=0 THEN  LET x=1: GO TO
 7220
7215 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7216 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7217 IF ATTR (x,y)=57 THEN  LET
x=x+1: GO TO 7220
7218 BEEP .005,a: PRINT AT x,y;
INK 1;"A"
7219 PAUSE 4: NEXT a
7220 FOR a=3 TO 0 STEP -1
7221 PRINT AT x,y; INK 1;"A": PR
INT AT x,y;" "
7222 LET x=x+1
7223 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7224 IF x=16 THEN  GO TO 146
7225 IF ATTR (x,y)=59 THEN  GO S
UB 8100
7226 IF ATTR (x,y)=57 THEN  LET
x=x-1: GO TO 146
7227 BEEP .005,a: PRINT AT x,y;
INK 1;"A"
7228 PAUSE 4: NEXT a
7230 RETURN
7299 REM
7300 REM        fall
7301 REM
7310 FOR a=13 TO 0 STEP -1
7315 PRINT AT x,y;" "
7320 LET x=x+1
7325 IF ATTR (x,y)=58 THEN  GO S
UB 8000
7327 IF ATTR (x,y)=59 THEN  GO S
UB 8100
7330 IF ATTR (x,y)=57 THEN  LET
x=x-1: GO TO 146
7360 BEEP .005,a: PRINT AT x,y;
INK 1;"A"
7380 PAUSE 4: NEXT a
7390 RETURN
8000 PRINT AT x,y; INK 1;"A"
8001 LET k=k+1: LET z=z+10
8002 IF z=3500 THEN  GO TO 9800
8003 IF z>q THEN  LET q=z
8004 PRINT AT 19,6; PAPER 1; INK
 6;z
8005 PRINT AT 19,25; PAPER 1; IN
K 6;q
8006 PRINT AT 20,8; PAPER 1; INK
 6;k
8007 PRINT AT 20,25; PAPER 1; IN
K 6;lvs
8008 BEEP .05,10
8010 IF k=13 THEN  LET lvs=lvs+1
8011 IF k=13 THEN  LET k=0: GO T
O 3
8012 PRINT AT x,y;" "
8013 RETURN
8017 PRINT AT x,y;" "
8100  BEEP .1,-15
8105 IF lvs=0 THEN  LET z=0
8107 IF lvs=0 THEN  LET k=0
8108 IF lvs=0 THEN  LET lvs=4: G
O TO 9000
8114 LET lvs=lvs-1
8115 LET k=0
8120 GO TO 3
9000 PRINT AT 10,11; INK 1; PAPE
R 5; FLASH 1;"GAME OVER";AT 12,5
;"PRESS 0 TO PLAY AGAIN";AT 14,8
;"PRESS 9 TO ABORT"
9010 LET f$=INKEY$
9015 IF f$="" THEN  GO TO 9010
9020 IF f$="0" THEN  GO TO 2: ST
OP
9025 IF f$="9" THEN  GO TO 9999
9030 IF f$<>"9" OR f$<>"0" THEN
 GO TO 9015
9700 INK 6: PAPER 0: BORDER 0: C
LS : LET a$=" You are a Megatron
 droid who    has been punished b
y the gods    You are in a never
ending chain of repetitive caves
              The only way to esc
ape is to     amass a score great
er than 3499 by collecting the r
are grarn     fruits which litter
 the caves
                          GOOD LUC
K                    (Your gonna n
eed it)"
9710 FOR a=1 TO LEN a$
9720 PRINT a$(a TO a);: IF a$(a
TO a)=" " THEN  GO TO 9740
9730 PAUSE 1: BEEP .002,57
9740 NEXT a
9750 PRINT AT 14,0;"Interface 2,
Ram Turbo compatible"
9760 PRINT AT 16,0;"Q-Left
              W-Right   O-Jump le
ft P-jump right"
9770 PRINT AT 19,12;"M-Jump up"
9780 PAUSE 350: GO TO 2
9800 INK 6: PAPER 0: BORDER 0: C
LS : PRINT AT 10,8;"CONGRATULATI
ONS"
9801 DATA 0,3,2,3,4,3,5,5,0,6,5,
3,4,3,5,3,7,5,2,6,5,3,4,3,5,3,9,
3.5,7,1.5,7,4,5,3,5,3,4,3,2,4,4,
4,5,9
9802 FOR x=0 TO 21: PRINT AT 10,
8;"CONGRATULATIONS": READ b: REA
D a: BEEP a/14,b: NEXT x
9809 INK 6: PAPER 0: BORDER 0: C
LS : LET a$="CONGRATULATIONS
 joystick is broken or your fing
ers are aboutto drop off but you
 would       insist on completin
g the game"
9810 FOR a=1 TO LEN a$
9820 PRINT a$(a TO a);: PAUSE 1:
 IF a$(a TO a)="." THEN  GO TO 9
840
9830 BEEP .002,57
9840 NEXT a
9850 GO TO 9000
9999 INK 0: PAPER 7: BORDER 7: C
LS
```

WE WANT YOU NOW!

If you have an original program or routine *Sinclair User* would love to see it. Offerings supplied on tape, with an explanation and preferably a listing as well, which are interesting enough not to fill us with instant boredom could be worth big money. Well, middle-sized money, anyway.

Send your offerings now to: Printout, Sinclair User, EMAP, 30-32 Farringdon Lane, London EC1R 3AU

THE FILER

Here's a really neat little program from Lea Pearson of Nottingham. As you may have guessed, it's a filing program. This program stores files in memory which can be saved to tape for future use. Also the program will allow you to destroy files, view the file of your choice, and even print out a hard copy. Text can only be about one screen long though.

To alter the number of files which can be stored, you can change the values of the *Dim* statements in Lines 3, 4 and 5. The first number is the number of files, the second is the number of characters.

```
   1 REM )))BY LEA PEARSON)))

   2 REM ***INITIALISE*** BORDER
 0: PAPER 0: INK 9: CLS
   3 BORDER 0: PAPER 0: INK 9: C
LS : DIM a$(10,640)
   4 DIM F$(10,10)
   5 DIM G$(10,100)
   6 LET COUNT=0
   7 DIM Q(10,3)
   8 FOR N=1 TO 10: LET A$(N)=""
: LET F$(N)="": LET G$(N)="": NE
XT N
   9 LET FILE=1
  10 REM )))GET PASSWORD AND NAM
E)))
  20 PRINT : PRINT "PLEASE ENTER
 PASSWORD THEN NAME"
  30 INPUT C$
  35 IF C$<>"GVTTT" THEN  PRINT
"YOU CANNOT PASS": POKE 23635,0
  40 IF C$="GVTTT" THEN  PRINT "
O.K YOU MAY PASS": GO TO 100
 100 REM )))MAIN PROG)))
 101 REM )))MENU)))
 102 CLS
 103 PRINT AT 0,6; INVERSE 1;"M
A I N  M E N U"
 104 PRINT : PRINT : PRINT
 110 PRINT : PRINT TAB 6;"1.CREA
TE FILE"
 120 PRINT : PRINT TAB 6;"2.DEST
ROY A FILE"
 130 PRINT : PRINT TAB 6;"3.PRIN
```

GRAPHICS IN PRINTOUT

Underlined capital letters in any of the listings are user-defined graphics characters. To type them in go into Graphics Mode and press the corresponding letter

```
T OUT A FILE"
 140 PRINT : PRINT TAB 6;"4.LOOK
 AT A FILE"
 145 PRINT : PRINT TAB 6;"5.SAVE
 FILES TO TAPE"
 146 PRINT : PRINT TAB 6;"6.LOAD
 FILES FROM TAPE"
 150 PRINT : PRINT : PRINT : PRI
NT TAB 8;"SELECT OPTION:-"
 160 IF INKEY$="1" THEN  GO TO 1
000
 170 IF INKEY$="2" THEN  GO TO 2
000
 180 IF INKEY$="3" THEN  GO TO 3
000
 190 IF INKEY$="4" THEN  GO TO 4
000
 195 IF INKEY$="5" THEN  GO TO 5
000
 196 IF INKEY$="6" THEN  GO TO 6
000
 200 IF INKEY$=" " THEN  POKE 23
635,0
 201 LET N=1
 210 GO TO 160
1000 REM )))CREATE FILE)))
1001 CLS
1002 PRINT AT 0,0;"FILES";: FOR
N=1 TO 10: IF A$(N)="" THEN  PRI
NT N;" ";: NEXT N: PRINT " ARE L
EFT"
1003 IF FILE>10 THEN  PRINT "NO
ROOM FOR FILE": PAUSE 0: GO TO 1
00
1010 INPUT AT 0,0;"PLEASE GIVE T
HE NAME OF YOUR FILE";G$(FILE)
1020 INPUT AT 0,0;"PLEASE ENTER
DATE(IN NUMBERS SEPARATED BY '/'
";F$(FILE)
1030 INPUT AT 0,0;"PLEASE ENTER
TEXT FOR FILE";A$(FILE)
1040 PAUSE 0: CLS : LET FILE=FIL
E+1: GO TO 100
2000 REM )))DESTROY FILE)))
2001 CLS :
2010 PRINT AT 0,6; INVERSE 1;"DE
STROY FILE"
2020 PRINT : PRINT : PRINT "ENTE
R FILE NUMBER TO BE DESTROYED OR
 '0' TO RETURN TO MAIN MENU"
2030 IF INKEY$="1" THEN  LET A$(
1)="": LET F$(1)="": LET G$(1)="
": CLS : GO TO 100
2040 IF INKEY$="2" THEN  LET A$(
2)="": LET F$(2)="": LET G$(2)="
": CLS : GO TO 100
2050 IF INKEY$="3" THEN  LET A$(
3)="": LET F$(3)="": LET G$(3)="
": CLS : GO TO 100
2060 IF INKEY$="4" THEN  LET A$(
4)="": LET F$(4)="": LET G$(4)="
": CLS : GO TO 100
2070 IF INKEY$="5" THEN  LET A$(
5)="": LET F$(5)="": LET G$(5)="
": CLS : GO TO 100
2080 IF INKEY$="6" THEN  LET A$(
6)="": LET F$(6)="": LET G$(6)="
": CLS : GO TO 100
2090 IF INKEY$="7" THEN  LET A$(
7)="": LET F$(7)="": LET G$(7)="
": CLS : GO TO 100
2100 IF INKEY$="8" THEN  LET A$(
8)="": LET F$(8)="": LET G$(8)="
": CLS : GO TO 100
2110 IF INKEY$="9" THEN  LET A$(
9)="": LET F$(9)="": LET G$(9)="
": CLS : GO TO 100
2120 IF INKEY$="0" THEN  LET A$(
10)="": LET F$(10)="": LET G$(10
)="": CLS : GO TO 100
2130 IF INKEY$="M" THEN  CLS : G
O TO 100:
2140 IF INKEY$=" " THEN  POKE 23
635,0
2150 GO TO 2030
3000 REM )))PRINT OUT FILE)))
3001 CLS
3010 INPUT AT 0,0;"PLEASE MAKE S
URE THAT PRINTER IS ON THEN INPU
T FILE TO BE PRINTED OUT:-";A
3020 PRINT "HIT ANY KEY TO BEGIN
"
3025 PAUSE 0
3030 LPRINT AT 0,24;F$(A): LPRIN
T AT 2,0;G$(A): LPRINT AT 4,5;A$
(A): PRINT : PRINT : PRINT "HIT
ANY KEY TO RETURN TO MENU": PAUS
E 0: GO TO 100
4000 REM )))LOOK AT A FILE)))
4001 CLS
4010 INPUT AT 0,0;"PLEASE ENTER
FILE TO BE LOOKED AT";FILE
4011 IF FILE=0 THEN  CLS : GO TO
 100
4012 FOR N=1 TO 10: IF A$(N)<>""
 THEN  LET COUNT=COUNT+1: NEXT N
4013 PRINT AT 0,0;COUNT;" FILES
IN USE"
4020 CLS : PRINT AT 0,20;F$(FILE
): PRINT AT 2,0;G$(FILE): PRINT
AT 4,5;A$(FILE): PAUSE 200: POKE
 23692,23
4030 PAUSE 0: CLS : GO TO 100
5000 REM )))SAVE TO TAPE)))
5001 CLS
5010 INPUT AT 0,0;"NAME FOR FILE
";R$: SAVE R$ DATA A$(): SAVE R$
 DATA F$(): SAVE R$ DATA G$()
5020 PAUSE 0: CLS : GO TO 100
6000 REM )))LOAD FILE)))
6001 CLS
6010 LOAD "" DATA A$(): LOAD ""
DATA F$(): LOAD "" DATA G$(): PA
USE 0: CLS : GO TO 100
```

TEXT PRINTER

Text Printer — from Stuart Box in Oxon — is, as you may have guessed, a text printer. It can be used to design pages of text with large or small characters, underlined or not. You can even load in screens from *Paintbox* and write over them, or so the instructions say. John Gilbert ran off with our copy so we couldn't test that bit.

It's dead simple. All you have to do is use the commands which you can read in the listing

```
  1 POKE 23658,8
  5 LET Y=0
  6 LET SI=0
 10 CLS
 20 PRINT AT 10,2;"PRESS ""I""
FOR INSTRUCTIONS."'"  OR ANY OTH
ER KEY TO CONTINUE.": PAUSE 0: I
F INKEY$="I" THEN  GO SUB 3000
 25 LET INV=0: LET Y=0: LET X=0
: LET X5=0: LET Y2=0: LET HEIG=5
: LET LENG=5: LET PAP=7: LET INK
=0: LET BRI=0: LET FLA=0
 30 CLS
 40 GO SUB 9000
500 GO TO 4000
1000 INPUT  LINE K$
1002 IF SPAC=1 THEN  DIM Y$(1,LE
N K$*2): LET CON=1: FOR Z=1 TO L
EN K$*2 STEP 2: LET Y$(1,Z)=K$(C
ON): LET CON=CON+1: NEXT Z: LET
K$=Y$(1)
1005 FOR Z=1 TO LEN K$
1010 LET X=X5+Z-1: LET Y=Y2
1060 LET I$=K$(Z)
1065 GO SUB 1140
1070 NEXT Z
1080 RETURN
1140 IF X>31 OR X<0 OR Y<0 OR SI
+Y>24 OR I$>" OR I$<" THEN  PRIN
T AT 0,32
1150 LET CS=(PEEK 23606)+((PEEK
23607)*256)
1160 LET C=CODE I$
1170 LET CP=CS+(C*8)
1180 GO SUB 1300
1190 LET CO=0
1200 FOR S=1 TO SI
1210 FOR N=0 TO 7
1220 LET POS=16384+((Y-F)*32)+Y1
+X+(N*256)
1230 IF CO=SI THEN  LET CP=CP+1:
 LET CO=0
1240 LET CO=CO+1
1250 POKE POS,PEEK CP
1260 NEXT N
1270 LET Y=Y+1
1280 IF Y=8 OR Y=16 THEN  GO SUB
 1300
1290 NEXT S
1295 RETURN
1300 LET Y1=INT (Y/8)
1310 LET F=Y1*8
1320 LET Y1=Y1*2048
1330 RETURN
3000 REM HELP
3010 CLS : LET SI=2: LET Y2=0: L
ET X5=2: LET SPAC=1: LET K$="INS
TRUCTIONS.": GO SUB 1002
3020 GO SUB 9100
3030 PRINT AT 2,2;"THIS PROGRAM
IS DESIGNED TO   MAKE SCREENS TO
 DUMP TO ZX OR   ALPHACOM TYPE P
RINTERS, OR TAPE RECORDER."
3050 PRINT AT 6,0;"""COPY"" WILL
 COPY THE SCREEN."'"""SAVE"" WIL
L SAVE THE SCREEN."'"""SET UP""
WILL SET UP HEIGHT &
 SPACING."'"""INPUT"" WILL ALLOW
 YOU TO TYPE            IN TEXT."
3060 PRINT """UNDERLINE"" WILL U
NDERLINE THE                LATEST
 TEXT."'"""POSITION"" WILL SET U
P X & Y ETC"'"""DELETE"" DELETES
 THE SET AREA."'"""FILL"" WILL C
OLOUR THE SET               AREA."
'"""COLOUR"" WILL SET UP THE COL
OURS"'"""CLS"" WILL CLEAR THE SC
REEN."'"""HELP"" WILL PRINT THIS
 PAGE.";)0;AT 0,0;"""END"" WILL
STOP THE PROGRAM."
3065 PRINT AT 21,0;"""LOAD"" WIL
L LOAD A' SCREEN$."
3070 PRINT )0;AT 1,5; INVERSE 1;
"  PRESS ""C"" TO COPY  "
3075 PAUSE 0: IF INKEY$="C" THEN
  COPY : LPRINT """END"" WILL ST
OP THE PROGRAM."
3080 CLS : PRINT '" YOU CAN JUST
 TYPE THE FIRST"'"THREE CHARACTE
RS OF A COMMAND,  IF YOU WISH."
3090 PRINT " YOU CAN LOAD IN A N
EW CHARACTERSET FOR USE, THIS WA
Y YOU CAN DOGRAPHICS. (EG. 23606
 & 23607)"
3092 PRINT "YOU CAN LOAD IN SCRE
ENS DESIGNEDON A SCREEN DESIGNER
```

```
 PROGRAM,   LIKE ""PAINTBOX""''
" WRITTEN BY STUART BOX. 1986."
3095 PRINT #0;AT 1,5; INVERSE 1;
"  PRESS ""C"" TO COPY  "
3098 PAUSE 0: IF INKEY$="C" THEN
  COPY
3100 PAUSE 0: CLS : RETURN
4000 INPUT  PAPER 4;" > "; PAPER
 7;" "; LINE C$
4005 IF LEN C$<3 THEN  GO TO 400
0
4010 IF C$(1 TO 3)="COP" THEN  G
O SUB 9500
4020 IF C$(1 TO 3)="SAV" THEN  G
O SUB 9200
4030 IF C$(1 TO 3)="UND" THEN  G
O SUB 9100
4040 IF C$(1 TO 3)="FIL" THEN  G
O SUB 9150
4050 IF C$(1 TO 3)="END" THEN  S
TOP
4060 IF C$(1 TO 3)="CLS" THEN  C
LS
4070 IF C$(1 TO 3)="COL" THEN  G
O SUB 9600
4080 IF C$(1 TO 3)="SET" THEN  G
O SUB 9000
4090 IF C$(1 TO 3)="INP" THEN  G
O SUB 1000
4100 IF C$(1 TO 3)="HEL" THEN  G
O SUB 3000
4110 IF C$(1 TO 3)="DEL" THEN  G
O SUB 9300
4120 IF C$(1 TO 3)="POS" THEN  G
O SUB 9400
4130 IF C$(1 TO 3)="LOA" THEN  L
OAD ""SCREEN$
4200 GO TO 4000
5000 STOP
9000 INPUT "SIZE OF WRITING ? ";
SI
9001 IF SI=0 THEN  CLS : GO TO 9
000
9002 LET SPAC=0: INPUT "SPACING
? "; LINE S$: IF S$="Y" THEN  LE
T SPAC=1
9010 RETURN
9100 LET LENG=LEN K$: LET X=Y2+S
I-1: LET Y=X5
9110 FOR Z=0 TO LENG-1: PRINT AT
 X,Y+Z; OVER 1;"_": NEXT Z
9120 RETURN
9150 DIM L$(1,LENG): FOR Z=Y2 TO
 Y2+HEIG-1: PRINT AT Z,X5; INVER
SE INV; PAPER PAP; INK INK; OVER
 1; BRIGHT BRI; FLASH FLA;L$(1):
 NEXT Z
9160 RETURN
9200 SAVE "SCREEN$"SCREEN$
9210 RETURN
9300 DIM L$(1,LENG): FOR Z=Y2 TO
 Y2+HEIG-1: PRINT AT Z,X5;L$(1):
 NEXT Z
9310 RETURN
9400 INPUT "X POS : ";Y2: INPUT
"Y POS : ";X5: INPUT "HEIGHT : "
;HEIG: INPUT "LENGTH : ";LENG
9405 DIM L$(1,LENG)
9408 IF Y2>21 OR Y2<0 OR X5>31 O
R X5<0 THEN  GO TO 9400
9409 IF Y2+HEIG>22 OR Y2+HEIG<0
OR X5+LENG>32 OR X5+LENG<0 THEN
 GO TO 9400
9410 FOR Z=Y2 TO Y2+HEIG-1: PRIN
T AT Z,X5; BRIGHT 8; INK 8; PAPE
R 8; OVER 1; FLASH 1;L$(1): NEXT
 Z
9415 PAUSE 100
9420 DIM L$(1,LENG): FOR Z=Y2 TO
 Y2+HEIG-1: PRINT AT Z,X5; BRIGH
T 8; INK 8; PAPER 8; OVER 1; FLA
SH 0;L$(1): NEXT Z
9430 RETURN
9500 INPUT "HOW MANY TIMES ? ";T
I
9510 FOR Z=1 TO TI: COPY : LPRIN
T : LPRINT : NEXT Z
9520 RETURN
9600 INPUT "INK ? (0-9) ";INK: I
NPUT "PAPER ? (0-9) ";PAP: INPUT
 "BRIGHT ? (0/1) ";BRI: INPUT "I
NVERSE ? (0/1) ";INV: INPUT "FLA
SH ? (0/1) ";FLA
9610 RETURN
9900 SAVE "PRINTER" LINE 1
9910 VERIFY ""
```

Adventure Builder — correction

The Adventure Builder System published in June/July contained a slip which must be put right before the program will run properly.

June issue. Page 84, second column. Should read 'seventeen' verbs rather than 'fourteen'. Page 86, listing 4. Quotation mark after semi-colon. Page 86, listing 4. Addition to Line 9958 :LET VB =0. Line 9958 should read LET PBS=256 . . . etc.

July issue. Page 86, column 4 Line 1090 should be deleted rather than the new Line 1050 and 1092 should be deleted rather than the new Line 1052.

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CRASH MAGAZINE – August

Note This unit is intended for software owners to transfer programs onto microdrive cartridges for speed and ease of access. Programs saved using the Mirage Microdriver are **Unreadable** unless the Microdriver is present.

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VISA AMERICAN EXPRESS

L'AFFAIRE VERA CRUZ

Hot on the heels of Mandragore comes L'Affaire Vera Cruz from French software house, Infogrames.

It's a strategy/hunt-the-killer game in which you play a detective looking for clues to a young woman's death. Is it suicide or murder?

Vera Cruz looks highly innovative and the game's played in two parts. The first screen shows the dead woman lying on the floor with her personal effects and other objects ranged round. Using a cursor you can actually zoom in on, say, the ashtray or her fingernails and in so doing discover clues and start to piece together the evidence on how or why she died.

Once you've zoomed in on something it appears in a large window with any additional information. A clever piece of programming.

Back at your office and having collected the evidence you next start the investigation proper, using your influence to access the Diamond Network — sounds like Interpol — to look up files and interrogate people who might be able to help with your enquiries.

Vera Cruz looks imaginative and quite unusual.

Streetdate: August 25. Price: £8.95.

ARMOUR OF ANTIRIAD

In a move away from squidgy pumpkins, Palace Software is about to release The Sacred Armour of Antiriad **— an arcade adventure set around a mystical piece of armour which you've got to find and assemble before going into battle.**

With the superb-quality graphics of Palace's previous hits, Antiriad **has you playing young super-hero Tal, and follows his efforts to save his race by fighting off the alien oppressors.**

The invaders rule from the depths of a sinister volcano and the deeper in you travel, the higher the radiation levels. If you're not wearing your anti-rad suit at this point you'll probably fry. Occasionally, though, you have to slip out of it to sneak into small crannies in your search for helpful objects. Sounds risky.

The scenery is highly coloured and the movement is convincing, especially Tal's rock-throwing antics.

With the game you get a great little comic describing the storyline. It's well drawn, easy to read and produced by the masters of the comic art, Marvel.

Streetdate: September. Price: under £10.

COBRA FORCE

Strike Force Cobra from Piranha has you as a commando in an impossible bid to save the world. I've heard that one before.

The storyline reads something like a James Bond novel. You and your team must defeat the dastardly world-ending plot of a criminal genius.

Once you've located the enemy fortress and nipped past the assorted guards you must locate some kidnapped scientists and get the computer code from them which will halt the computer countdown. Gasp!

The graphics look marvellous and are in glorious 3D, and as the countdown proceeds it becomes a desperate race against time.

Streetdate: September. Price: £9.95.

SAVING THE HE-MAN RACE

*US Gold has a number of exciting new games to be released btween now and Christmas, and these are apart from the arcade conversions — **Gauntlet, Xevious, Breakthru, Express Raider** and **Indiana Jones** — described on page 51.*

*First there's news of the popular children's TV cartoon **He-Man and the Masters of the Universe**. US Gold has bought the rights from Mattel and are planning to release both arcade and adventure versions which will be programmed by Adventuresoft. Adventuresoft has previously developed **The Hulk** and **Gremlins**, for US Gold both written by Brian Haworth.*

You play He-Man who rides around on his trusty steed, Battle Cat — an armour plated tiger. The idea is to save Eternia from the evil machinations of Skeletor who, with his equally devilish henchmen, hatch a plot to bring He-Man to his knees and so leave Eternia defenceless. He-Man, the TV series, has lots of escapades so it's likely that the arcade game will be different from the adventure.

Streetdate: Arcade: October; Adventure: November. Price: £8.95.

DIVE! DIVE!

Close the hatches. Down periscope. Dive! Dive! Dive! Yup, you're in a sub, in the middle of a war and the convoys are dropping depth charges.

Silent Service is one of several new US Gold releases between now and Christmas and simulates life under the high seas. You, as commander, have to make decisions: when to dive, when to launch your torpedoes, when to surface.

Up periscope and sweep the horizon, keep an eye on the map room, bridge and engine rooms, you can even surface and keep watch from the conning tower.

Check the gauges in the engine room, keep one eye on the periscope and track those convoys — guess what you do if you find one?

Streetdate: October. Price: £9.95.

Software Preview compiled by Clare Edgeley

DRUIDS

At first sight, Druids from Firebird looks very like Atari's coin-op giant Gauntlet.

It's only when you play the game that you realise Gauntlet must have inspired Druids. Very pretty graphics greet you in a scenario which could almost come from the original, were it not for a few changed oddments here and there. Nevertheless, it looks to be an excellent game. All fast action with a touch of strategy thrown in for good measure.

The idea is to attain the title of Light Master, though the lowliest rating tends to be Half-wit. Kill the baddies which hang around every corner of this maze-like game, open chests for spells and keys to open doors to get to the next level. Your assistant, the gorilla golem, is a slow creature with immense strength and it's useful if you can make golem go ahead killing off the adversaries while you cower behind him saving your strength for more important things.

Golem is controlled by the computer but you can instruct him to *Send, Follow* or *Wait*.

There are seven useful spells including ones which create a golem slave, unlock doors, kill of the grobiles and make you invisible.

Sounds like good stuff, more news on Druids later. The Commodore 64 version is here now — and the Spectrum version (above) is well under way.

Streetdate: early Autumn. Price: £7.95.

MIAMI VICE ON THE STREETS

The two trendiest detectives, Crockett and Tubbs, and their Ferrari are about to hit the screens in Ocean's ***Miami Vice****.*

No doubt complete with designer guns and designer attribute problems.

Word is out. A contraband shipment worth millions — could it be drugs? — is about to hit the streets, to be collected by a certain Mr J. All the designer duo know is the day it's arriving. It's up to you to help them find the time, the place and make the bust.

Somehow you've got to reach the big guys to get some solid information, but it's the small fry — the street dealers — who lead you to them. You're given a schedule of who's going to be in what sleezy down-town bar at what time, but you choose the order of who to visit.

Timing is all important when casing the, er, joint. Arrive too early and they'll see your car and blow. Arrive too late and there'll be nothing to see. The game ends if either Tubbs or Crockett is killed or they fail to apprehend Mr J.

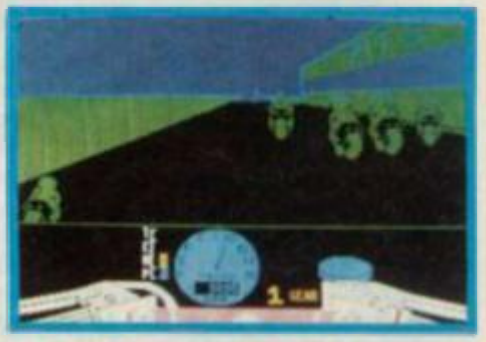
Crocket and Tubbs look pretty stick-like and you can't see the cut of their jacket, but these are mocked-up pre-production screenshots, so you never know, those knife edge creases may yet stand out.

Streetdate: September. Price: £7.95.

TT RACER

At last, the green light's on for TT Racer. It's just sped on to the Isle of Man track for its first race, after being stuck on the grid for the best part of a year.

Digital Integration's latest offering — their first since Tomahawk — is a TT racing simulation programmed with technical advice and help from Suzuki. In fact, the name Suzuki is emblazoned all over the packaging so it seems fair to assume that Suzuki is endorsing the product. Maybe even grubby fivers have been exchanged.



Climb through the gears as you take the chicanes at hair-raising speed to beat other top racers in the World Championships.

The game scrolls in front of you as you race around, and nice touches are the handlebars at the bottom of the screen, together with the necessary gauges which show your revs and speed. There's also a detailed menu which allows you to practice on any one of 12 race tracks before entering the big one.

TT Racer seems to have much genuine detail, though we'll have to wait to play it to see how it handles on the Spectrum.

Streetdate: September 3. Price: £9.95.

DAN DARE AND THE MEKON

Dan Dare, popular hero from *The Eagle*, has made it to the big screen, thanks to Virgin.

You kick off as an embarrassed Dan who's the main target of *This Is Your Life*. Just as the guests start making him squirm, a large TV screen suddenly splutters to life, and the head of The Mekon — an evil global tyrant — appears. He plans to hold the world to ransom — he's about to destroy it with a hollowed-out asteroid.

Dan, the hero, has 120 minutes to save the Earth, so he leaps into his trusty space ship and flies for the asteroid, hoping to destroy it before it reaches the target.

It's an arcade adventure. Search the chambers in the asteroid to find five pieces of a self-destruct mechanism which must be inserted in their correct places in the control room. Treens (what the heck are they?) knock him unconscious, or carry him off to prison, or merely sap his strength. Whatever they do, valuable time is lost. Objects can be found to help him in his task — energy booster pills, laser gun rechargers and such like.

Beware, The Mekon himself might be on the asteroid, then who knows what will happen to Earth.

Streetdate: August 26. Price: £9.95.

Background scenery
An energy dome ● If Dan jumps on this his energy is replenished ● Energy is lost when he comes into contact with the Treens
Dan's laser levels depicted here
This shows how much energy Dan has left
The gravity shaft ● This only travels in the direction of the arrow
The panel is much as it will be on the finished version ● Instead of a character depicting lives ● A clock is shown counting away the minutes ● Dan has 120 minutes to complete the game
The Mekon shouts insults from his corner ● And keeps track on Dan's every move ● A speech bubble appears above his head

PREVIEW

Piranha are breeding fast. This new branch of Macmillan Software has two more games planned to follow the first three Trap Door Colour of Magic and Nos Feratu.

Rogue Trooper, the hero of Nu-Earth in the cult comic 2000AD faces a battle which takes him over the Scum Sea and Ozart mountains to track down a traitor and free the good guys. The last Genetic Infantryman left, his buddies have been converted to electronic chips by the baddies. probably Z80s, I would imagine, wouldn't you?

There's a whole range of weapons at hand and the survival of the blue-skinned men are in your hands alone. Lots of blasting in this one, methinks.

Streetdate: September. Price: £8.95.

URIDIUM

Hewson's Uridium, already a successful and very popular shoot 'em up on the Commodore 64 is being converted to the Spectrum.

This fast, action-packed space game takes you through 15 star systems where, in each planet's orbit, you have to destroy the deadly Super Dreadnoughts and their defending fighters.

There's a bit more to the game than just blasting everything. After you've disposed of the waves of alien fighters, you must land on the Dreadnought's runway and glide into the fuel rod chamber taking as many fuel rods as possible before time runs out and the Dreadnought vapourises. Of course, when that happens you want to be well out of the way.

Dodge mines and missiles, perform half-rolls and loops and avoid the Dreadnought's meteor shields. The graphics and pace of the game on the Commodore are hard-nosed, clearly defined and very fast. It should be as good on the Spectrum.

Streetdate: October 28. Price £8.95.

DEMPSEY AND MAKEPEACE

Cop this! After Miami Vice comes Dempsey and Makepeace. Britannia Software has bought the rights to the hit TV series. It's nice to know that it'll be the home grown cops (well, one anyway) against the all American duo.

I hope this isn't going to be the start of a let's-licence-some-famous-cops epidemic. I can do without Juliet Bravo, the computer game.

Dempsey and Makepeace is a kidnap drama. It's a nice touch that you can choose who to play, either Dempsey or Makepeace — which means that the other partner has been kidnapped. Make use of the famous SI10 computer back at Spikings' office to hunt for motives and clues. Search the streets for objects and enter buildings to look for more clues. The kidnap locations and objects are changed randomly each time you play, so it shouldn't pall.

The way Britania describes it, the game sounds like a cross between Batman and Ghostbusters. The inside of buildings have a Batman feel with a 45 degree projection of the game, and the street scenes are like a 3D Ghostbusters. We'll have to wait and see.

Streetdate: September. Price £8.95.

CRAZY ZYTHUM 'N' BLUES

Zythum looks like a nice little arcade game and is Mirrorsoft's latest release following Dynamite Dan II.

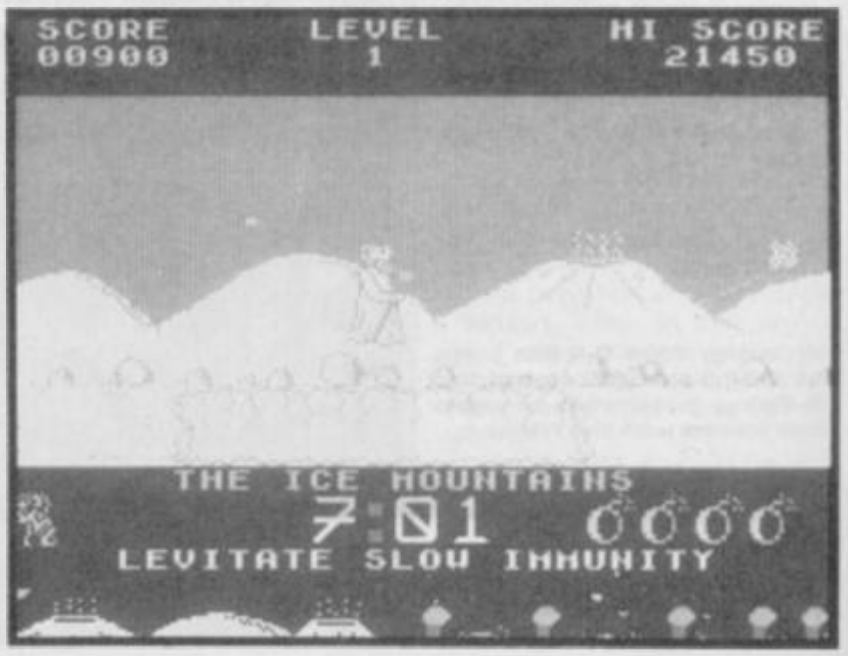
It's played over four strange hostile lands through which you've got to travel in order to get hold of a magical drink which lies hidden in a fortress.

Each land is guarded by a custodian and contact with him means the usual instant death. For protection you have a magical staff which throws out fire bolts and the like depending on which custodian you're up against. You also have four smart-bombs which clear the immediate vicinity of any nasties. More can be found *en route* to replenish your store.

A map at the bottom of the screen shows the correct land you're travelling in and the one next to it, though unhelpfully it doesn't show the large patches of quicksand you have to jump across. For help here, a chalice gives you powers of levitation and a cross immunity against the guardian.

But you've got to find them first . . .

Streetdate: September. Price: £7.95.



REVOLUTION

Vortex has had considerable success with its last two games, Highway Encounter and Alien Highway. By the sound of it Revolution, their latest, should be another winner.

Very much in the classic Vortex style of monochrome graphics and sophisticated 3D effects, Revolution places you in control of a bouncing ball.

The idea is to travel up a number of geometric stacks solving four puzzles on each and negotiating a number of extremely tricky obstacles.

Each puzzle consists of two objects — one of matter, the other anti-matter. You've got to grade your level of bounce to reach and touch one and then within a set time, bounce to the other to make it harmless. The game is played on a diamond-shaped grid and between any two objects you may trip up on slippery blocks and be hurled across the room. In later screens parts of the grid disappears entirely.

There are 32 puzzles in all, 16 easy, 16 hard and these are chosen at random at the beginning of each new game. In effect, you should never have to play the same game twice. There's a map which you can refer to and that shows where each of the puzzles are located, though it's up to you to find them on the grid and work out how to get to them. Sounds horribly frustrating.

Streetdate: September. Price: £9.95.

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PREVIEW

CAMELOT WARRIORS

Camelot Warriors from Ariolasoft is frankly, pretty weird. It's a platform game of sorts with some superb graphics. I'm not sure what your ultimate aim is, but you're dreaming and having a pretty confusing time.

Worlds — past, present and future — merge into one so you end up battling your way through an usual hotch potch of landscapes and characters. You'll meet the King of Camelot, knights, killer fish and electric eels.

All very odd.

Streetdate: End of September. Price: £8.95.

COLOSSAL LEVEL 9

Most keen adventurers will have heard of, or played, Colossal Adventure in one of its many versions since the original Crowther and Woods effort. Level 9 released its version and followed up with Dungeon Adventure and Adventure Quest.

Now the trilogy has been revamped and is being rereleased by Rainbird Software on three cassettes. One of the major innovations is the addition of graphics, very much in the Level 9 style, there are about 500 pictures in all.

There're over 1,000 words of vocabulary and you can even use multi-statement commands.

Included in the package is a book — *The Darkness Rises* — which sets the scene. Sounds fun.

Streetdate: August. Price: £14.95.

UCHI MATA

We've been inundated with Karate/Kung-Fu games and so it' only fair that Judo should get a look in too.

With the help of Brian Jacks, five times World Champion and a mere 7th Dan, Martech has got **Uchi Mata** together — a judo simulation.

Two can play, or one against the computer and there are two parts to the game. The first, in which you practise against a computer opponent grades your standard of play and gives you a belt rating, in the second you must try to throw a series of more professional partners.

The sprites are larage as the characters grapple for the best holds and attribute problems seem to have been solved by entrapping each figure in a white halo — a bit like **Dark Sceptre**.

Streetdate: September. Price: £8.95.

COSMIC

After **Uchi Mata**, Martech's other release sounds pretty silly.

You play what can only be termed a fourth division superhero called **Cosmic Shock Absorber**. When strange things start happening to the world, like mutant carrots marching around blasting everyone with sub-machine guns, or dive-bombing crabs with manic eyes on stalks, it's decided that something ought to be done. Unfortunately, all the known superheroes are otherwise engaged so this messy job lands on your plate.

Flying around in your little craft with machine guns whch swivel 360 degrees, you set about knocking off the carrots. Played in 3D, with lots of levels and bizarre adventures, you'll soon wish you'd been otherwise engaged too!

Streetdate: October. Price: £7.95.

Trivial Pursuit™

Where does a Vietnamese keep his dong? When was the last British Cavalry charge? If you want to know the answers, you'll have to play ***Trivial Pursuit****.*

Domark is about to release the Spectrum version of thef Yuppies favourite game.

Trivial Pursuit *comes on two cassettes, one the game, the other the question bank. Domark is already working on future question tapes — Baby Boomer, Genius II and Young Players Additional.*

Streetdate: September 9. Price: £14.95.

DROIDS ARE DEACTIVATORS

Deactivators is one of several Ariolasoft games due soon. It looks highly original with some unusual screen designs.

The storyline is simple. A secret research centre has bene overrun by terrorists who've managed to get past the security system and plant bombs. And it's about to blow sky high.

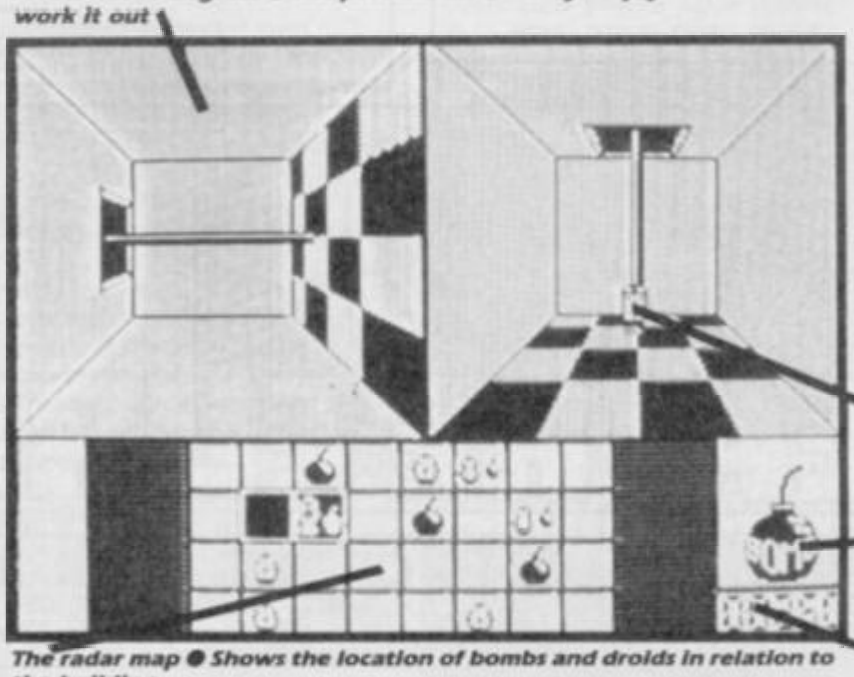
Your only hope is use a team of deactivating droids to enter the building and find and defuse the explosives. You control them as a team from outside, and using a blueprint of the place, direct them to the bombs which they then chuck out of the windows.

Naturally there are a few hazards. The previously loyal guards have been reprogrammed to attack your droids. Also, each room has its own gravity levels and your droids find the going tough as things either float or are too heavy. The building is large and you'll need to map the many rooms exactly so that you know how to get your droids and the bomb to the nearest window. And there's a time limit. Those bombs won't wait forever.

On the first level you're broken in gently with a mere three bombs to remove and three droids to get them. As you search deeper into the building, the bombs on each level multiply as do your droids, so your task as controller is pretty hectic. Finally, if you get bored, you can always use the screen editor to design your own rooms. Neat, eh?

Streetdate: October 6. Price: £8.95.

A room at 90 degrees ● The pole is a lift ● Turn your joystick around to work it out



The radar map ● Shows the location of bombs and droids in relation to the building

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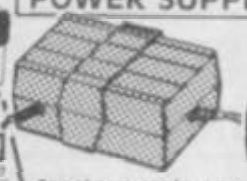

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NEXT MONTH

Stay ahead of the game — read Sinclair User

With any software house worth its chips flexing its muscles ready for the *PCW* Show and the big Christmas push, October should be a month in which utterly wonderful and staggeringly terrible new products simply oooze from the pages of this magazine. Among the good stuff will be some astounding new games from Faster Than Light. Among the dross . . . well, we'll name names next month.

Some nifty hardware is also coming, Cheetah have some tasty looking music gear and there could be some news on a major product. That's major with a capital M.

Among the special features there's a detailed look at the top ten bulletin boards (that means the ones we, in our totally opinionated way, choose as best) what they offer and how you hook into them.

In fact so far as October is concerned you don't know the half of it — some of the stuff we've got planned is . . . how can we put it? . . . Remember the second world war? . . . That sort of size.

The problem is if were tell you now, some people we wouldn't want to know about it will hear.

Trust us. You need next month's issue.

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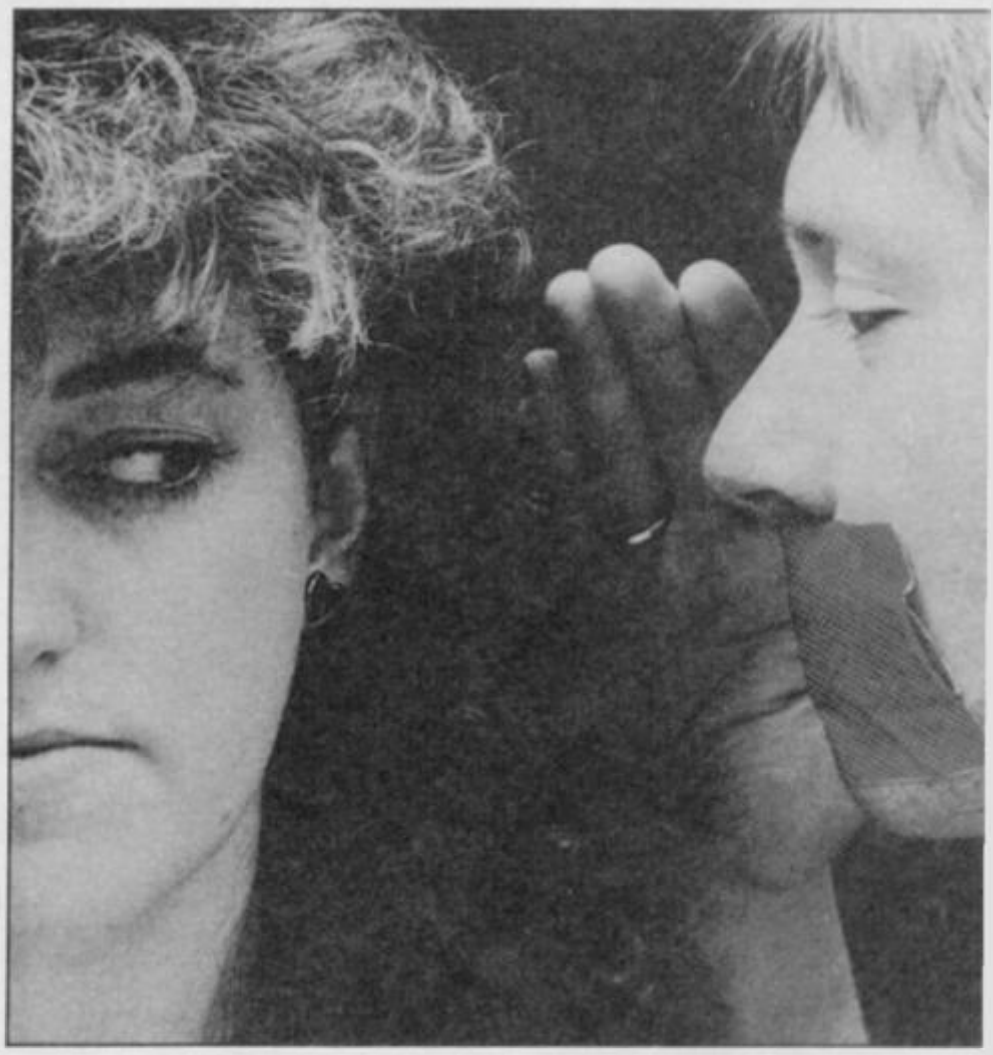

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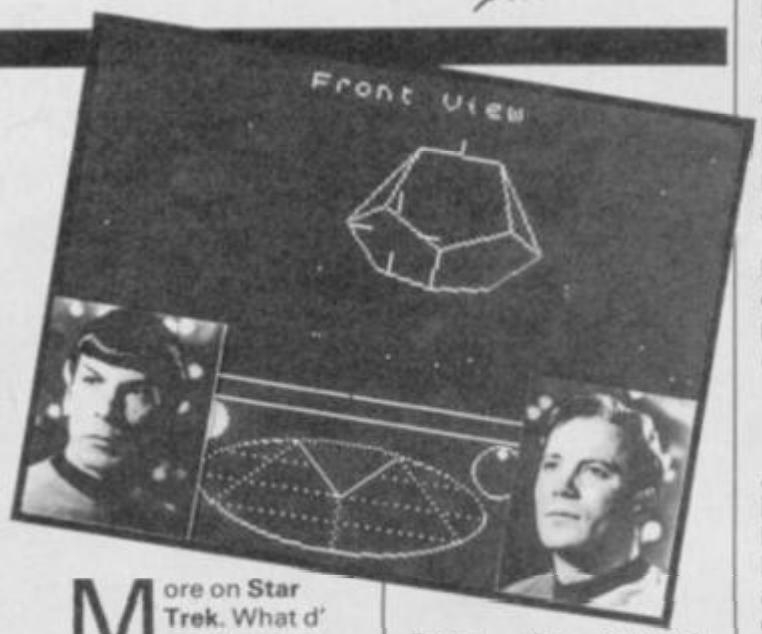


Expect the expected. Just in case Beyond has forgotten, this is what Elite looks like.

More on **Star Trek**. What d' ole *Grem* tell you? Beyond are putting out the game of the film of the show for Christmas — as predicted by *Gremlin* last month.

Some details have emerged. Where last month *Gremlin* totally fabricated details like 'icons of the crew' and '**Elite**-style graphics', this month it can be exclusively revealed that, according to someone close to the project, it will be a 'sort of combination of **Elite** and **Shadowfire** with digitised images of the crew'. *Gremlin* can but smile knowingly.

The project is a programmers' *Who's Who* with everybody who is anybody in the software world working on it, through the names escape *Gremlin* at the moment. The team is however led by Mike 'waiting for Godot' Singleton which means that whilst there is a tiny chance the game will be OK it will not in fact be available until the millenium.

Following this convincing proof of mystic oracular powers, *Gremlin* is to issue a regular booklet entitled *Old Gremlins Almenack* full of predictions about world events. In the current edition *Gremlin* reveals that Dusty Springfield will not have a comeback hit record, temperatures will be below the seasonal norm, the *Beatles* will not reform, you will never find that Biro you lost and the Aquarius will be not be a successful computer.

Now *Gremlin* is reluctantly prepared to admit that, despite being horribly trendy, *Trivial Persuit* is quite an entertaining pastime mainly as an excuse to reminiss over old TV programmes whilst downing several pints of Pratt's Old Peculiar.

It may even be that the Dom Dom brothers' computer version (which has been offered to about 27 magazines on an exclusive basis so far by roving PR man diddy Dave Carlos) may be worth a few minutes attention.

But surely *King Chip* must be the most tedious variant of the original game format ever invented.

King Chip has approximately 5,000,000,000,000,000 questions all stored on little cards. The trouble is every one of the questions is about computers. Initial enthusiasm was high among the *Sinclair user* staff (when they thought it was a normal *TP* type game) all of whom claimed to be specialists on some subject or other (Clare Edgeley wanted questions on cats and coin ops, David 'Judy Driscoll' Kelly on the early movies of Sergio Leone, Graham Taylor on James Joyce and Philip Glass, whilst the Mad Celt nominated Brains SA [skull attack] as his specialist topic).

Should you wish to bore your friends to death or get rid of people at parties try *King Chip*.

Not content with merely choosing an utterly naff name for its games software house, ie Piranah, Macmillan has hit upon an even more appalling concept — featuring the flotsom and jetsome of the computing press on the cassette insert of some new game or other.

A dozen or so hacks most of whom have seldom seen daylight were assembled (attracted by the magic words 'we'll take your picture') dressed in all manner of curious clothes (wearing deviant clothing is second nature to many of them).

Some of the hacks went way over the top.

The idea behind this fancy dress was that the journalists (here the word is used in the loosest sense possible) should pretend to be crack commandoes, (and commandettes).

Revelation of the event was John 'Capn Birdseye' Gilbert who was so impressed by his portrayal of a salty seadog that he resolved to grow a real beard in place of the cosmetic one in the picture.

Capn Birdseye's false fungus

Gremlin welcomes the news that Ocean is to produce the **Miami Vice** computer game. A licencing deal that has been zooming around the highways of the software industry for over a year now (originally Hewson and Hutchinson were involved, I recall).

Gremlin reckons the Spectrum is the ideal computer for a game based on the designer cops 'n' robbers show where colour coding is more important than crime.

Just watch how accurately this aspect is reproduced in the game as characters and cars change colour to match the background.

Want to make a few hundred quid? Here's how: ring Macmillan and threaten to go out and bite someone. Listen to them quake and cough up that cash.

As part of the deal for **Nosferatu** Macmillan, on the insistence of the film company, had to arrange one million pounds worth of insurance in case someone was so disturbed by the game that they went gaga and started biting people who subsequently sued.

Gremlin is prepared to bite the person of your choice right now for a 50% cut of the blackmail proceeds.

What is Andrew 'Mr Debonair businessman 1984' Hewson doing camped out on a suburban lawn with software space cadet and Steve Hillage lookalike Jeff 'Spirit of 67' Minter?

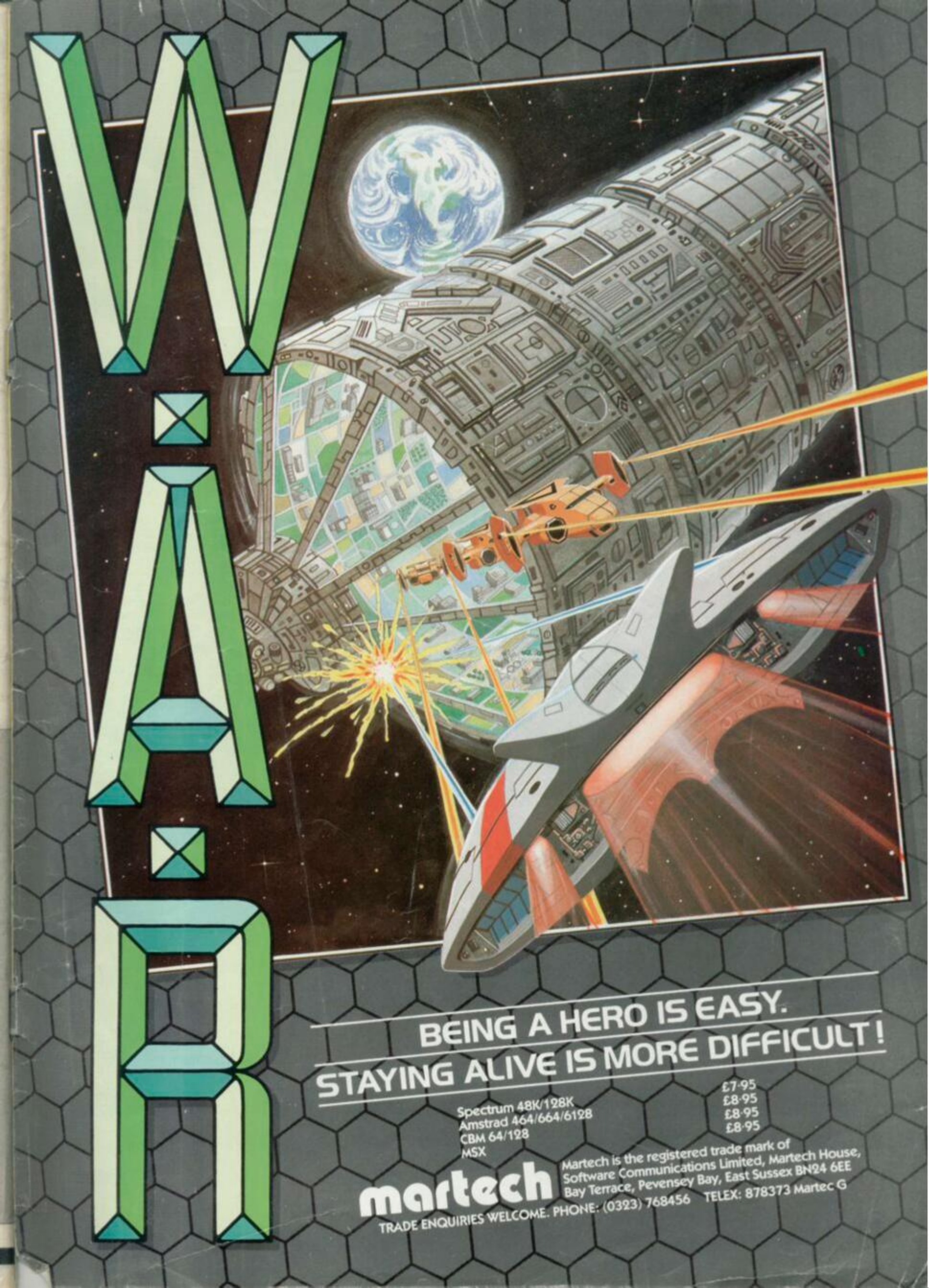
Gremlin can exclusively reveal that this is not merely a silly photo celebrating a software deal. In fact the perverse duo are believed to be forming a pop group described by Jeff as being 'like the *Pink Floyd* and *Status Quo* playing simultaneously.

'We'll have bloody great Marshall amps and I'll be doing these incredible five-hour screaming guitar solos'.

Andrew suggested the music would be 'smooth and silky with me laying down some smoochy and sophisticated piano riffs — sort of like Bryan Ferry'.

A name for the band has not been finalised, suggested titles so far are *Icon Lama Turner, The Pet Shop Fogies* (no, not Fergies), *Sheep Trick* and *Min-son.*

The first joint (and I use the word with care) software release from the team is **Brighton Belle Burn Up**. It is a tasteful simulation of a steam journey from London to Brigton in which you gently puff your way through the rolling Sussex Downs watching the steam guages and using your ultra-zap photon lasers to obliterate the roving packs of integalactic turbo sheep which are nibbling the upholstery in the first class compartments ■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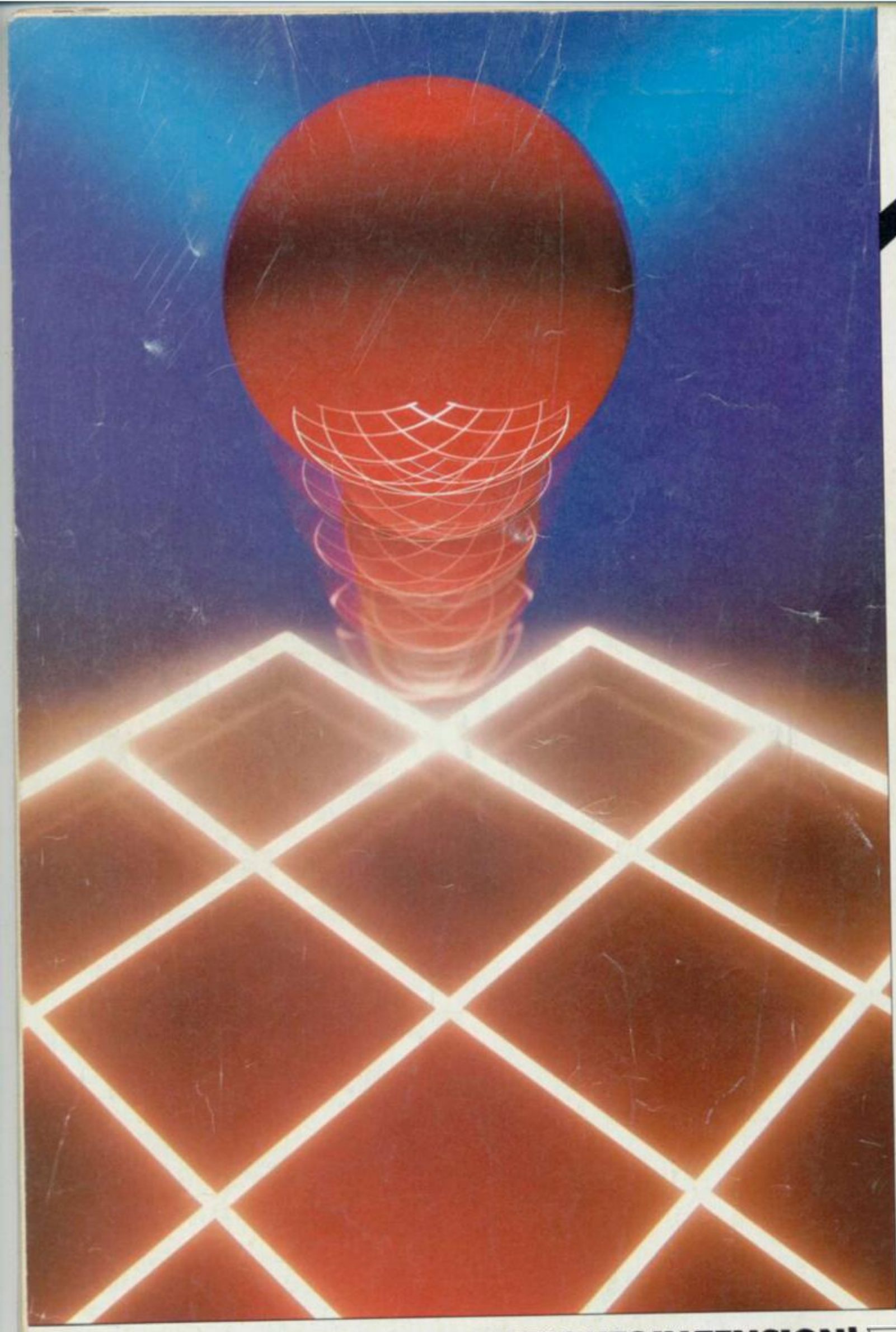

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